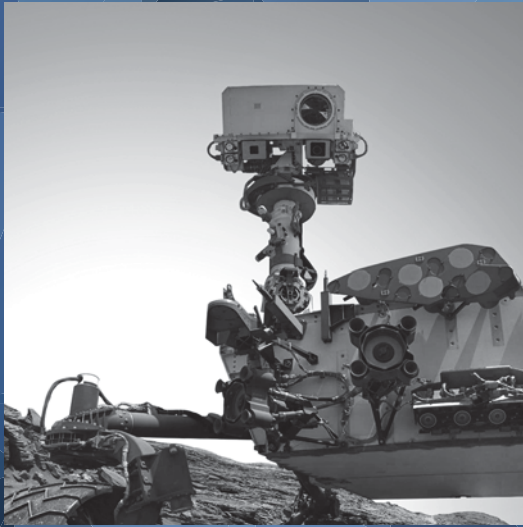


OMNETICS

CONNECTOR CORPORATION



MICRO & NANO STRIP CONNECTORS

Micro .050" (1.27mm) & Nano .025" (.64mm) Catalog



ABOUT OMNETICS CONNECTOR CORPORATION

Omnetics Connector Corporation is a leading global provider of precision and high-reliability electronic connectors and interconnect systems. For more than 30 years, we have engineered an extensive portfolio of innovative products, with a special focus on micro-miniature and nano-miniature interconnects. With over 300 direct employees, all products are built in the Minnesota factory in compliance with ISO 9001 offering QPL products to MIL-DTL-83513 and MIL-DTL-32139 and are ITAR registered.

Our connectors are among the smallest on the market and deliver exceptional performance in challenging work environments. As interconnect technologies continue to evolve, we design next-generation products that help bring transformative ideas to life.

Our connectors are highly sought after by designers working in the military, aviation, aerospace, medical and other leading-edge industries. We are also leaders in high-mobility interconnects for applications in robotics, surveillance systems and orbital satellite technology.

Omnetics understands the rigorous operating conditions mission-critical applications endure and our solutions include EMI shielding, IP sealing, polarization, rugged materials, and other elements that ensure connectivity under pressure. We maintain a large inventory of COTs products.

Omnetics' range of nano, micro and hybrid connectors are ideal for defence programmes, where factors such as size, weight, signal integrity and reliability are thoroughly considered. We provide a variety of reduced size and weight interconnection systems:

- Micro and Nano strip connectors
- Micro and Nano circular connectors
- Bi-Lobe[®] / Nano-D
- Polarized Nano connectors
- Squeeze-latching Nano-D and Micro-D connectors
- MIL-DTL-32139 Nano-D connectors
- MIL-DTL-83513 Micro-D connectors
- Hybrid connector configurations
- Cable assemblies
- Wire harnesses

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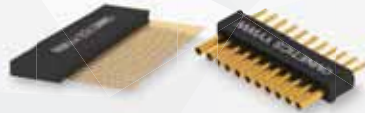
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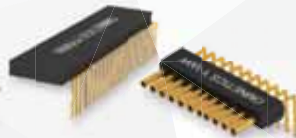
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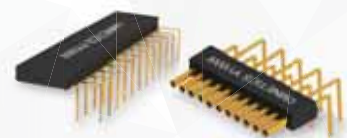
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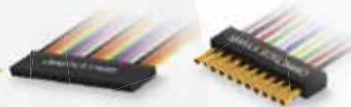
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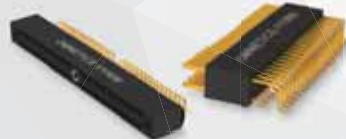


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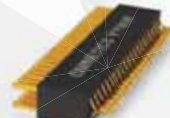
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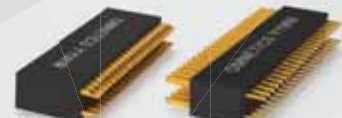
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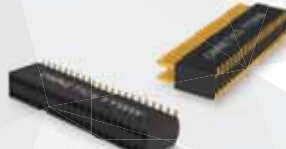
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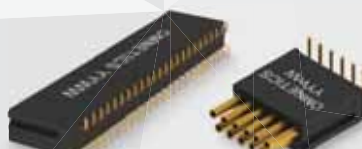
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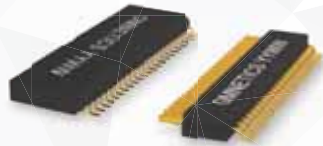
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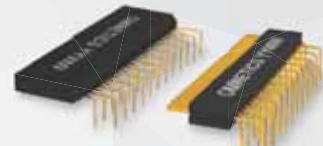
SINGLE ROW NANO STRIP (NPS/NSS) SERIES:



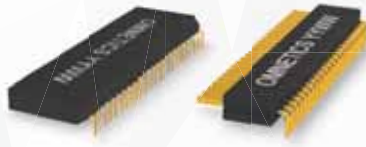
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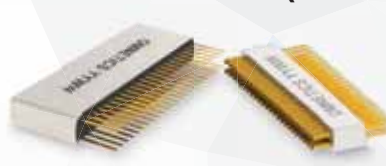


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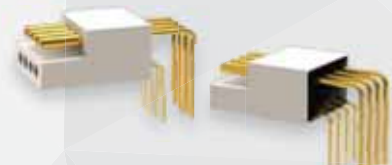
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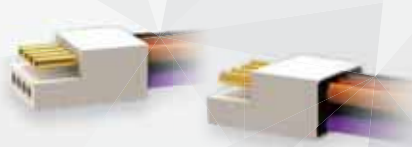
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Flex Pin - Micro

THE FLEX PIN DESIGN

Designed Simply for High Shock & Vibration

Omnetics' Flex Pin contact design was designed and produced many years before the creation of MIL-DTL-83513. This simple one piece design is stamped from ASTM B194 BeCu. The spring characteristic of BeCu is ideal for withstanding high shock and vibration.

The Flex Pin contact is intermateable with all MIL- DTL-83513 sockets. Its rugged design easily passes the shock and vibration requirements of the military specification. In fact, independent tests have proven that the Flex Pin contact can even withstand the intense shock and vibration of the geophysical drilling market.

Flex Pin contacts are all plated with 50 micro inches (1.27 μm) of gold over 50 micro inches (1.27 μm) of nickel. All pins are plated post forming to ensure a non-porous surface.



FLEX PIN

The Omnetics Micro Flex Pin has been in successful production for 50 years. Omnetics looked at the old Twist Pin technology and found ways to improve and simplify the design. Omnetics removed the extra crimps and welds and came up with an elegant one-piece design with the same performance as the overly complex twist pin. The elimination of extra joints removed resistance points as well as spots for potential fatigue and failure.

Micro Flex Pins are rated at 3 amps each and are the foundation of our Micro-D and MIL-DTL-83513 series of connectors.



MICRO FLEX PIN

Single Row Micro Strip

HORIZONTAL SMT (TYPE AA)

Horizontal SMT Micro Strip connectors offer an extremely low profile package that is well suited to pick and place methods. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations.



ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

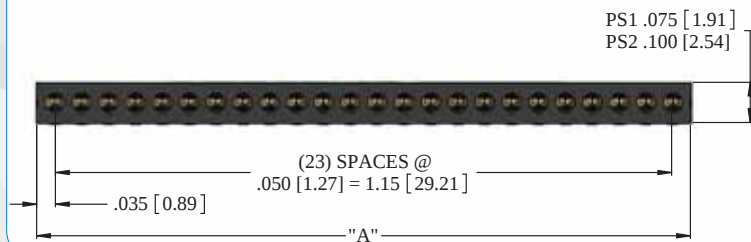
MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Solder per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plate per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plate per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plate per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Micro Strip

PS1/PS2-AA LAYOUT

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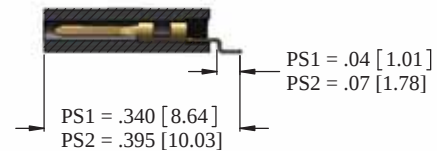
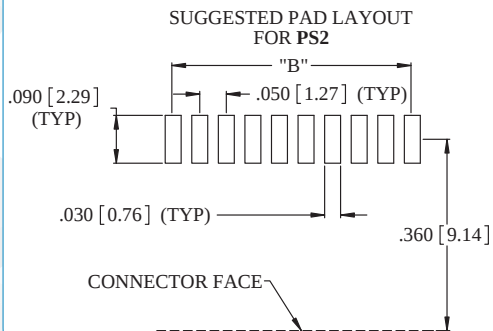
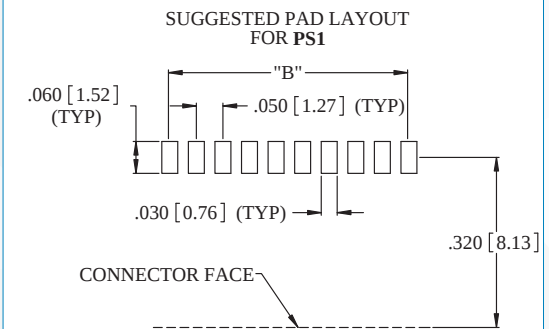


DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer.



DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

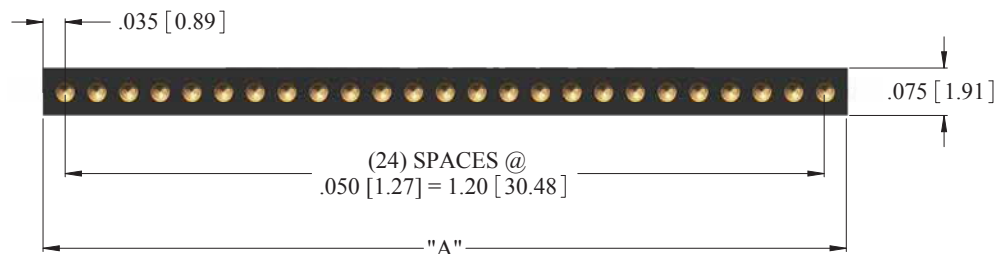
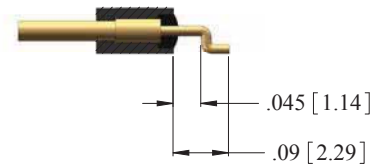
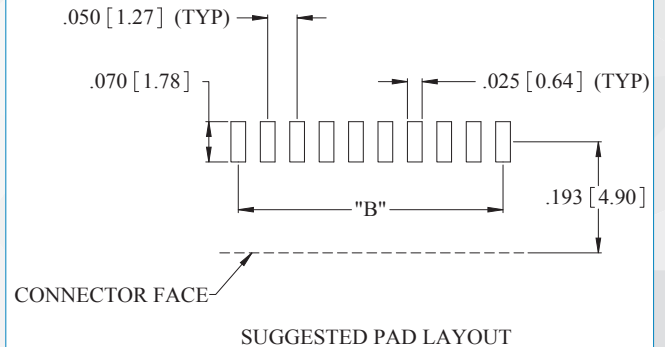
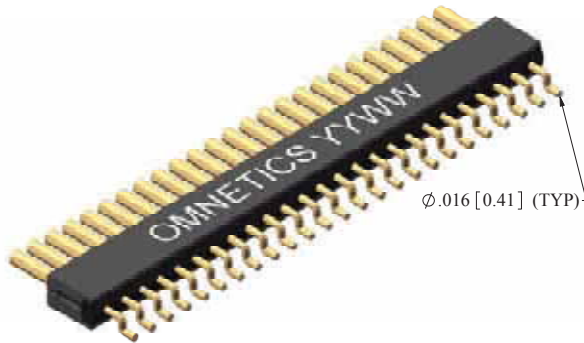
Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.35" (59.69). Add .100" from center of mounting hole to first pad (if the first contact cavity is for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .050"	_____
Add .150" (3 contact cavities) for each mounting hole	_____
Add fixed end length	.070"
Total Length (Dimension A)	_____

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .050"	_____
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	_____
Add .050" (1 contact cavity) for each guide post	_____
Add .150" (3 contact cavities) for each mounting hole	_____
Total Length (Dimension B)	_____

Notes: Maximum pad layout length 2.35" (59.69). Add .100" from center of mounting hole to first pad (if the first contact cavity is for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

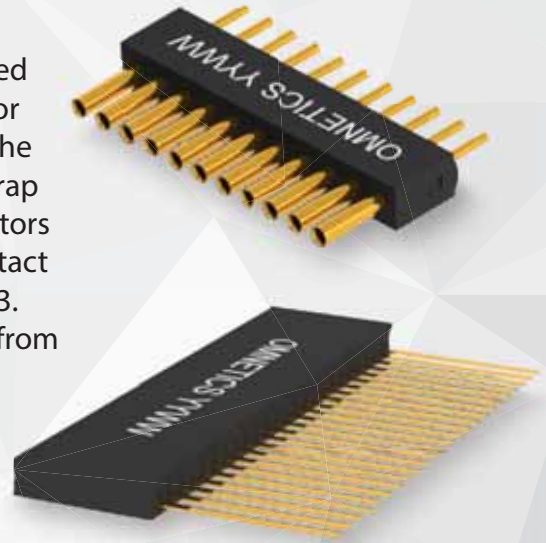
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick	02 - 48	AA	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
PS2 PIN CONNECTOR .100" thick			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
SSB SOCKET CONNECTOR			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
EXAMPLES:			M MOUNTING HOLE
			HT HIGH TEMP
			RoHS RoHS COMPLIANT
			
 PS1-06-AA-M	 SSB-24-AA-LT		
 SSB-24-AA-LE	 SSB-17-AA-M-GS		

Single Row Micro Strip

STRAIGHT TAIL (TYPE DD)

The Single Row .050" Micro Strip connectors are configured with simple straight tails (Integral or Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits. The straight solid tails are also commonly used in ultra fine wrap terminations, such as as electrophysiology. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

- Durability: _____ 2000 Cycles
- Temperature: _____ -55°C to +125 °C (200 °C w/HTE)
- Current rating: _____ 3 AMPs max per contact
- Voltage Rating (DWV): _____ 600 VAC RMS Sea Level
- Insulation Resistance: _____ 5000 Megohms min @ 500 VDC
- Shock: _____ 50 g's discontinuity < 1 microsecond
- Vibration: _____ 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: _____ NASA SP-R-0022
- Contact Resistance: _____ 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact

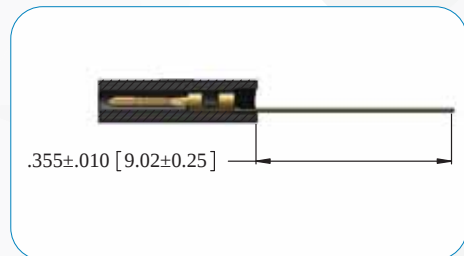
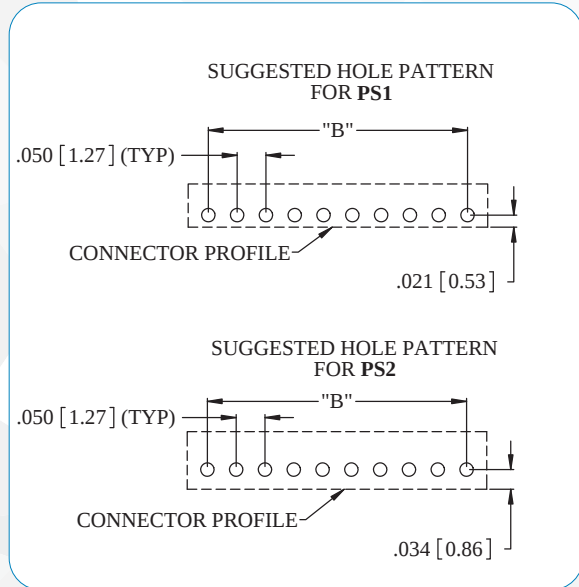
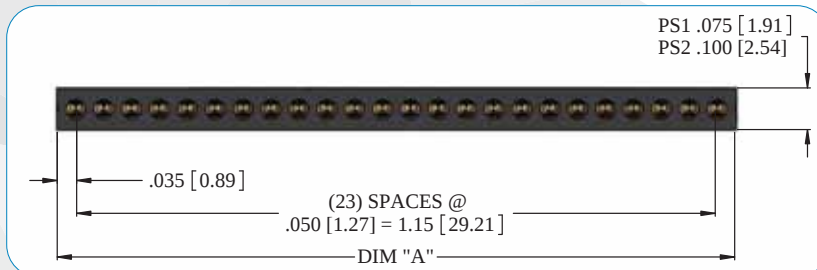
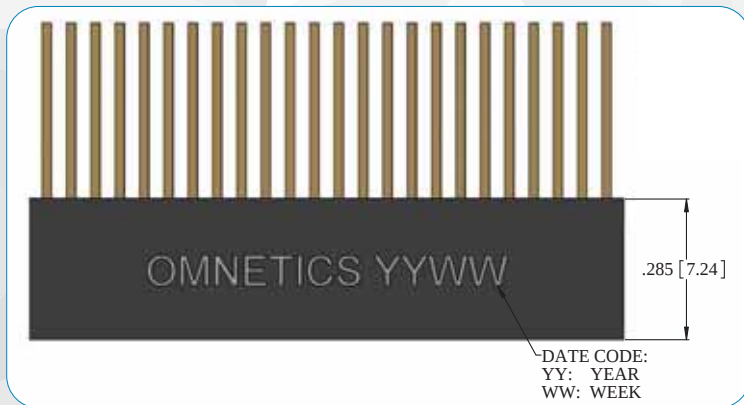
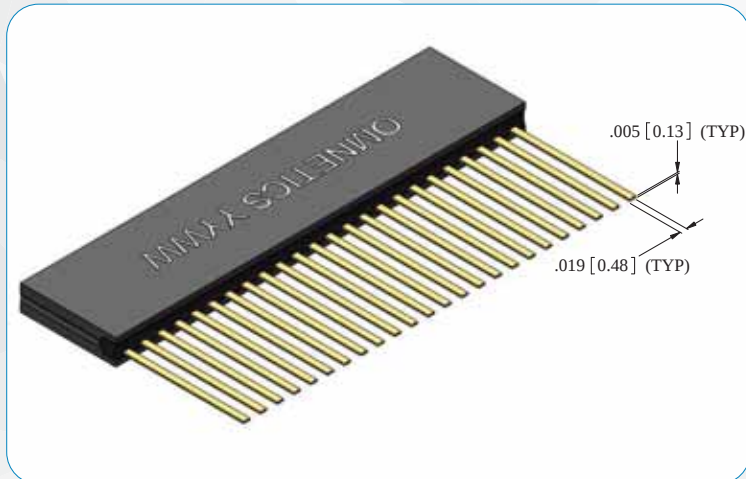
MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: _____ Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: _____ Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: _____ Hard gold plate per ASTM B488
- RoHS Socket PCB Tail Termination: _____ Hard gold plate per ASTM B488
- Insulator: _____ Polyphenylene Sulfide per MIL-M-24519
- Pin: _____ Gold Plated BeCu
- Socket: _____ Gold Plated Copper Alloy
- Encapsulant: _____ Epoxy

Single Row Micro Strip

PS1/PS2-DD LAYOUT

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DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length for PS1 @ .075" thick 2.42" (61.47) Maximum number of contact cavities is 48. Maximum length for PS2 @ .100" thick 3.02" (76.71) Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

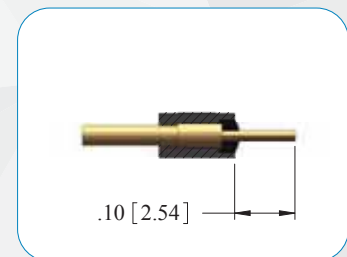
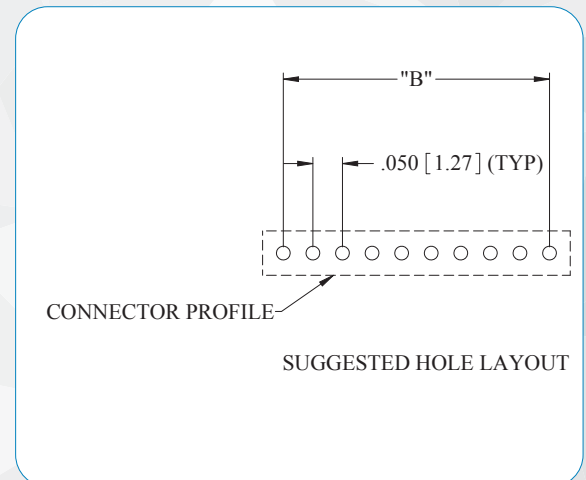
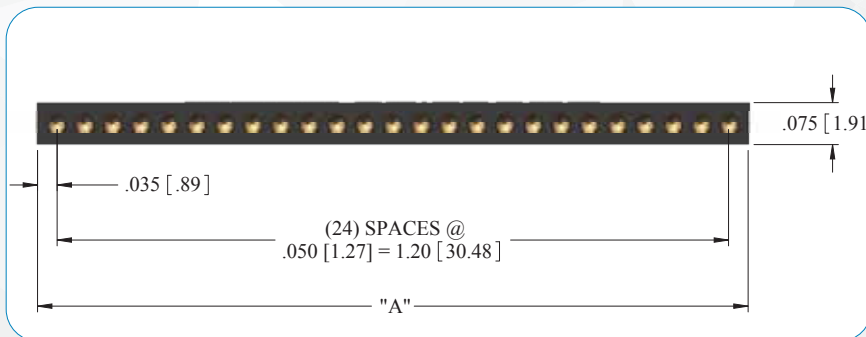
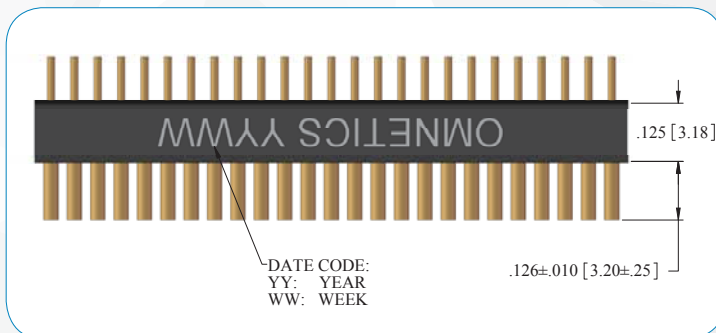
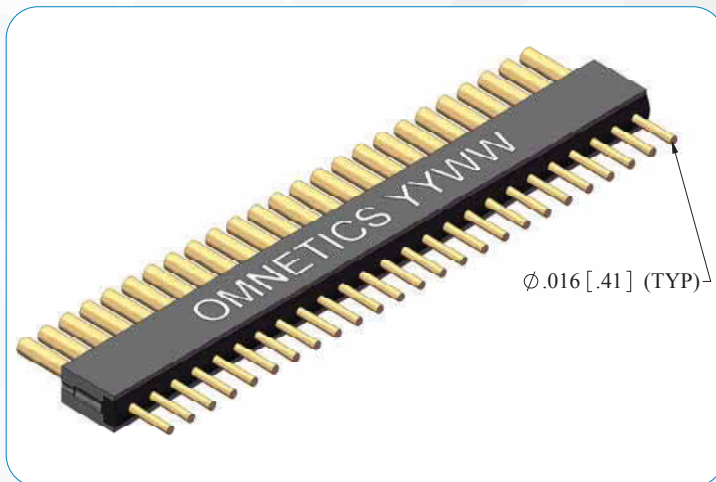
Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum hole pattern layout length for PS1 is 2.35" (59.69). Maximum hole pattern layout length for PS2 is 2.95" (74.93) Add .100" from center of mounting hole to first hole (if the first contact cavity is used for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

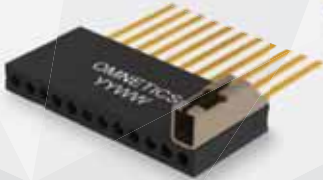
Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.35" (59.69). Add .100" from center of mounting hole to first pad (if the first contact cavity is for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

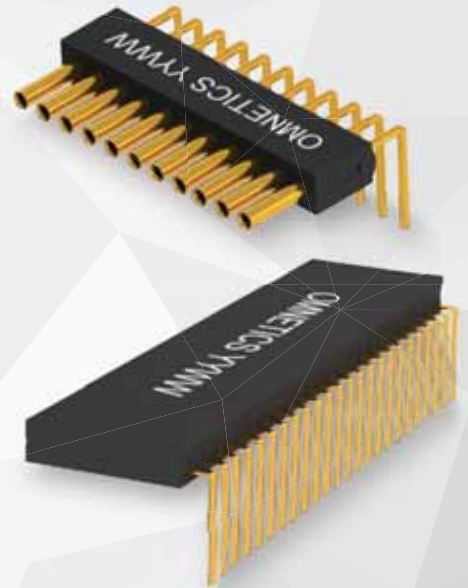
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick	02 - 48	DD	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
PS2 PIN CONNECTOR .100" thick			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
SSB SOCKET CONNECTOR			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			M MOUNTING HOLE
			HT HIGH TEMP
EXAMPLES:			RoHS RoHS COMPLIANT
 PS1-11-DD-LT-RoHS	 SSB-25-DD		
 SSB-24-DD-LE	 SSB-17-DD-M-GS		

Single Row Micro Strip

SHORT THRU-HOLE TAIL (TYPE BB)

The Single Row .050" Micro Strip connectors are configured with three different thru-hole options depending on your board's configuration: BB-Short Thru Hole, H2-Short/Long Alt, and CC-Long Thru Hole. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

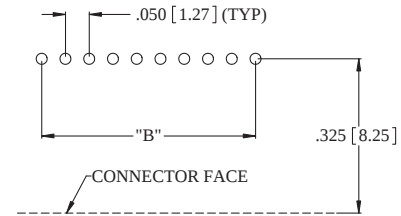
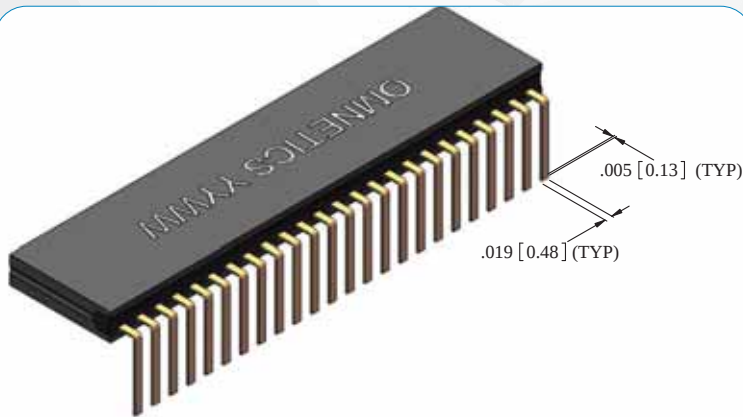
MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Micro Strip

PS1/PS2-BB LAYOUT

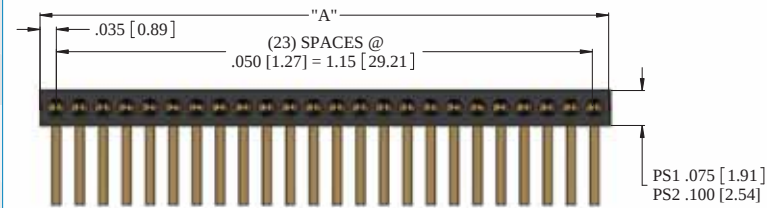
16



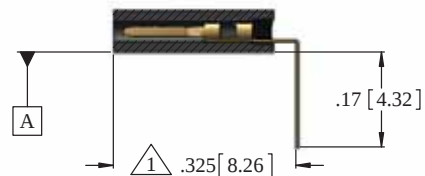
SUGGESTED HOLE PATTERN



DATE CODE:
YY: YEAR
WW: WEEK



1 TAIL DIMENSIONS APPLY
AT PLANE A



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length for PS1 @ .075" thick 2.42" (61.47) Maximum number of contact cavities is 48. Maximum length for PS2 @ .100" thick 3.02" (76.71) Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

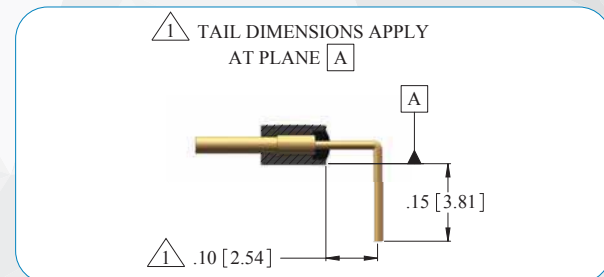
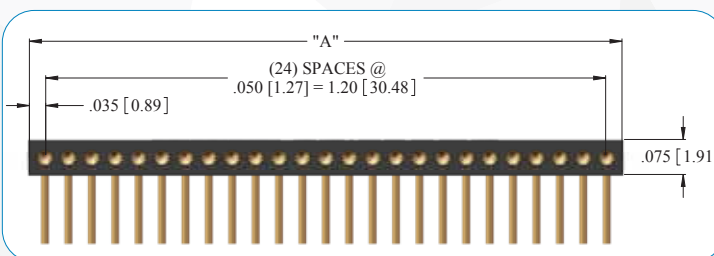
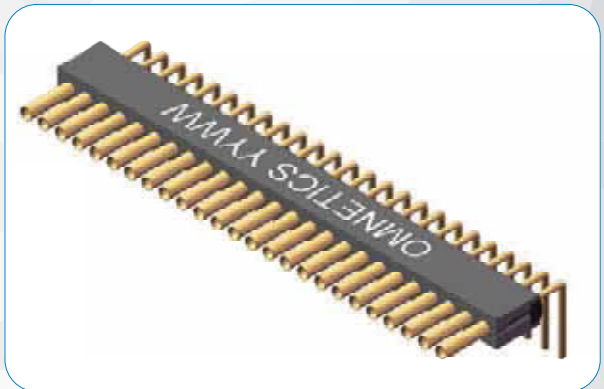
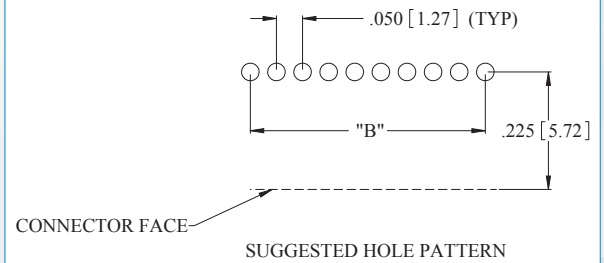
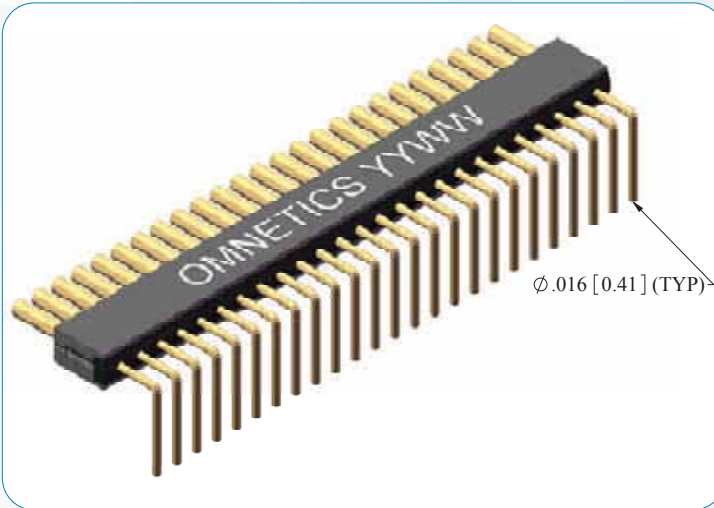
Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum hole pattern layout length for PS1 is 2.35" (59.69). Maximum hole pattern layout length for PS2 is 2.95" (74.93). Add .100" from center of mounting hole to first hole (if the first contact cavity is used for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-BB LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post	_____
Total contact cavities	_____
Multiply the number of contact cavities minus 1 by .050"	_____
Add .150" (3 contact cavities) for each mounting hole	_____
Add fixed end length	.070"
Total Length (Dimension A)	_____

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .050"	_____
If hardware features are within the contact area:	_____
Add .050" (1 contact cavity) for each latch	_____
Add .050" (1 contact cavity) for each guide post	_____
Add .150" (3 contact cavities) for each mounting hole	_____
Total Length (Dimension B)	_____

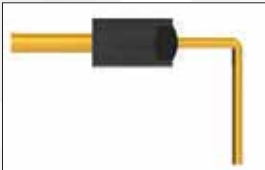
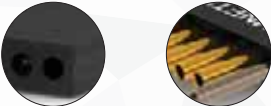
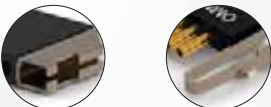
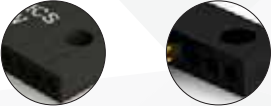
Notes: Maximum hole layout length 2.35" (59.69).

Add .100" from center of mounting hole to first hole (if the first contact cavity is for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SHORT THRU HOLE TAIL (TYPE BB) ORDERING GUIDE

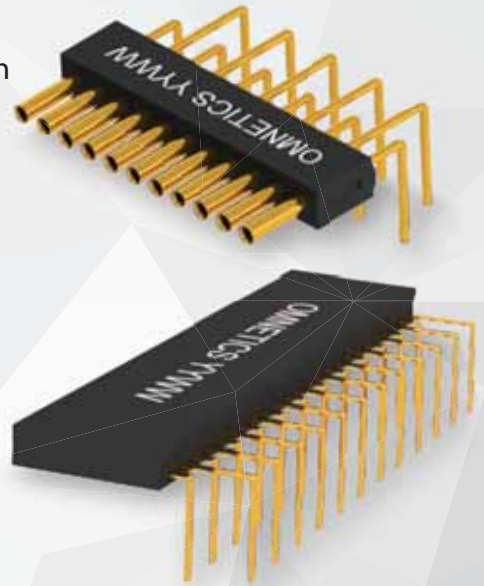
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick PS2 PIN CONNECTOR .100" thick 	02 - 48	BB  	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES  LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)  LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)  M MOUNTING HOLE  HT HIGH TEMP RoHS RoHS COMPLIANT 
SSB SOCKET CONNECTOR 			
EXAMPLES:			
 PS1/PS2-10-BB-LES	 SSB-24-BB-LT		
 SSB-24-BB-LE	 SSB-17-BB-M-GS		

Single Row Micro Strip

SHORT/LONG ALT. THRU-HOLE (TYPE H2)

The Single Row .050" Micro Strip connectors are configured with three different thru-hole options depending on your board's configuration: BB-Short Thru Hole, H2-Short/Long Alt, and CC-Long Thru Hole. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

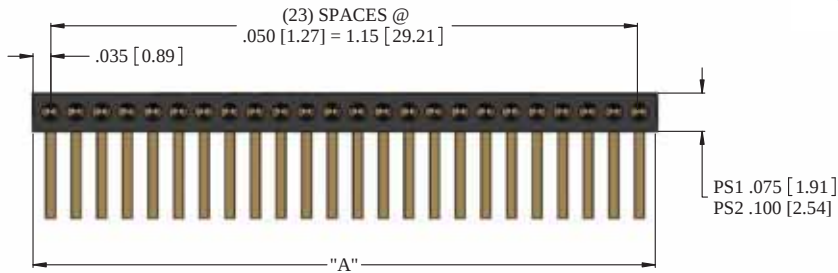
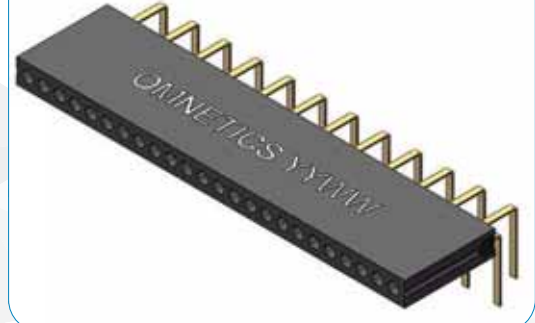
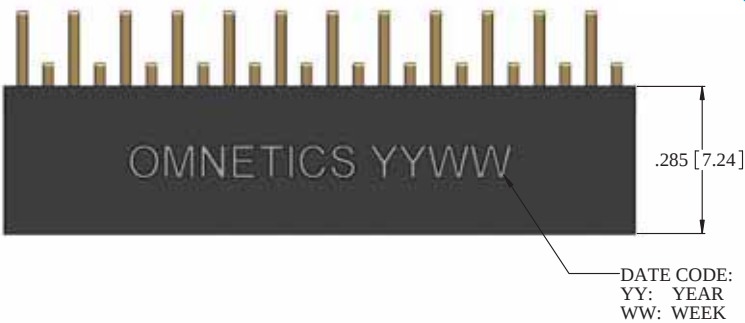
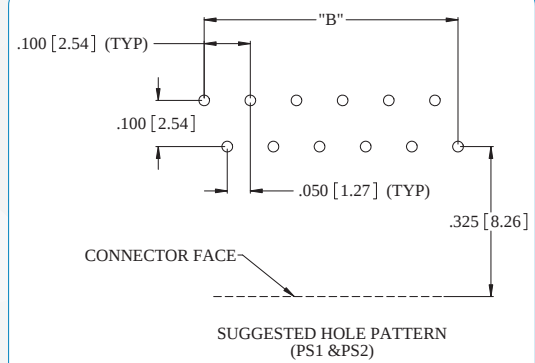
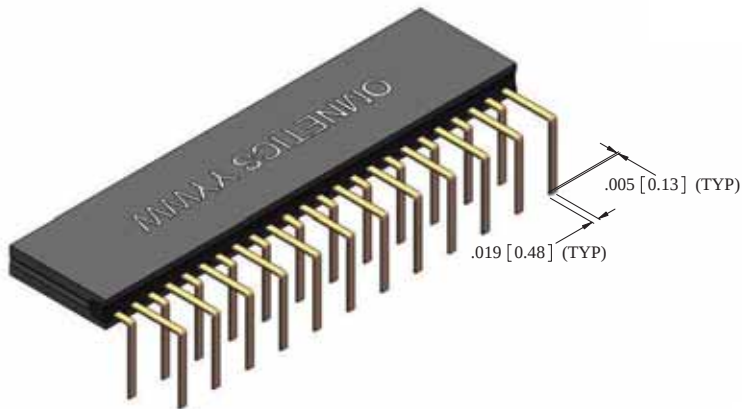
MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

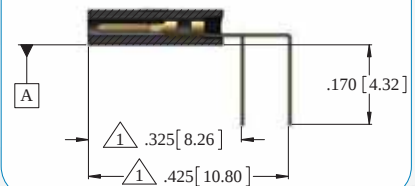
Single Row Micro Strip

PS1/PS2-H2 LAYOUT

20



1 TAIL DIMENSIONS APPLY AT PLANE A



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length for PS1 @ .075" thick 2.42" (61.47) Maximum number of contact cavities is 48. Maximum length for PS2 @ .100" thick 3.02" (76.71) Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

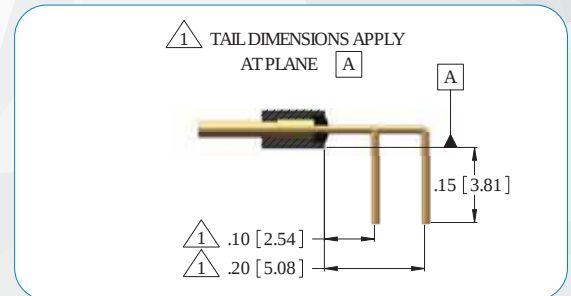
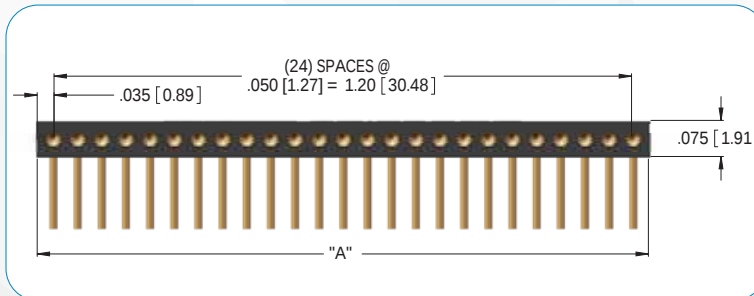
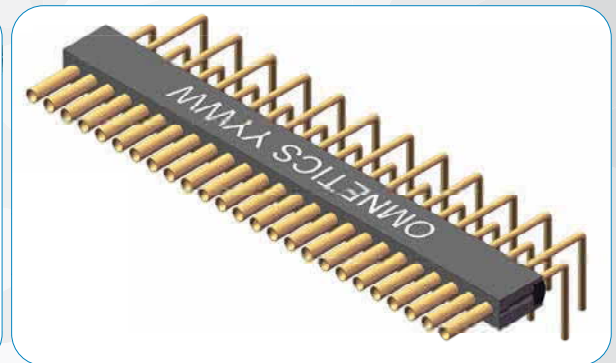
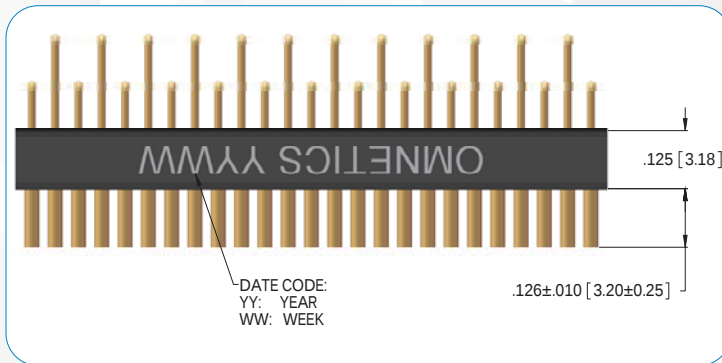
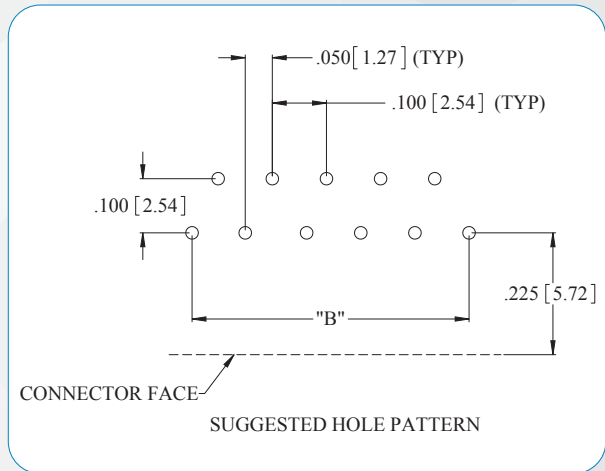
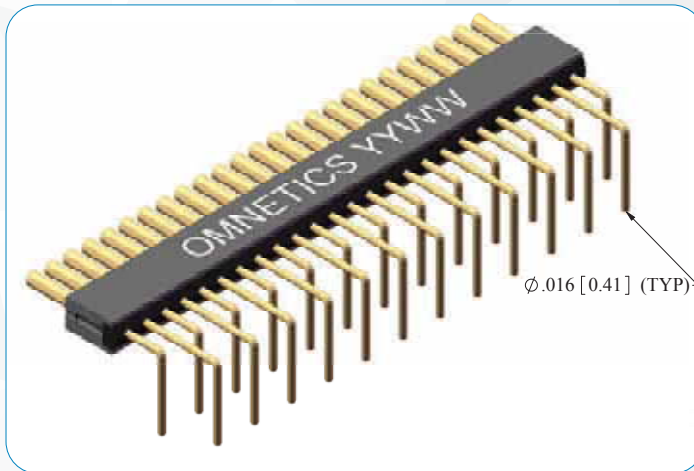
Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum hole pattern layout length for PS1 is 2.35" (59.69). Maximum hole pattern layout length for PS2 is 2.95" (74.93). Add .100" from center of mounting hole to first hole (if the first contact cavity is used for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

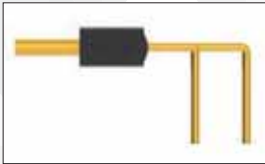
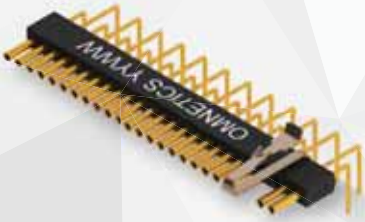
Notes: Maximum hole layout length 2.35" (59.69).

Add .100" from center of mounting hole to first hole (if the first contact cavity is for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SHORT/LONG ALT. THRU HOLE TAIL (TYPE H2) ORDERING GUIDE

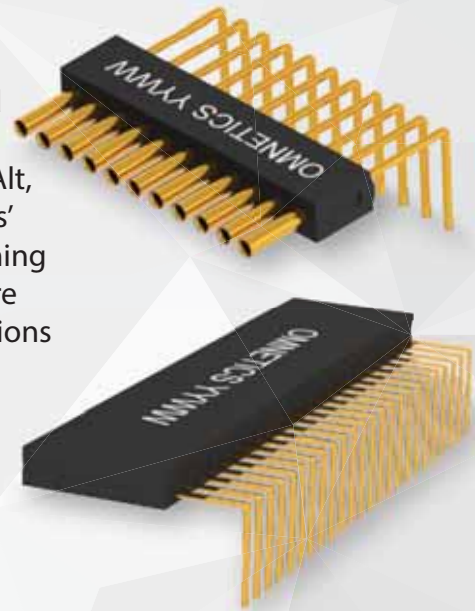
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick	02 - 48	H2	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
PS2 PIN CONNECTOR .100" thick			 
SSB SOCKET CONNECTOR			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
			 
			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			 
			M MOUNTING HOLE
			 
			HT HIGH TEMP
EXAMPLES:			RoHS RoHS COMPLIANT
			
PS1/PS2-06-H2-M	SSB-24-H2-LT		
			
SSB-24-H2-LE	SSB-17-H2-M-GS		

Single Row Micro Strip

LONG THRU-HOLE (TYPE CC)

The Single Row .050" Micro Strip connectors are configured with three different thru-hole options depending on your board's configuration: BB-Short Thru Hole, H2-Short/Long Alt, and CC-Long Thru Hole. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

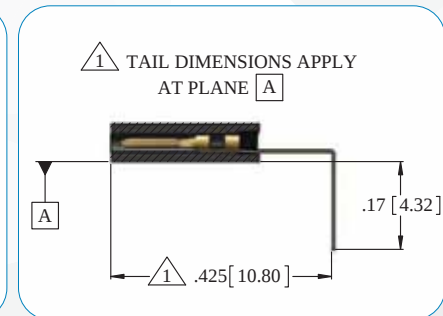
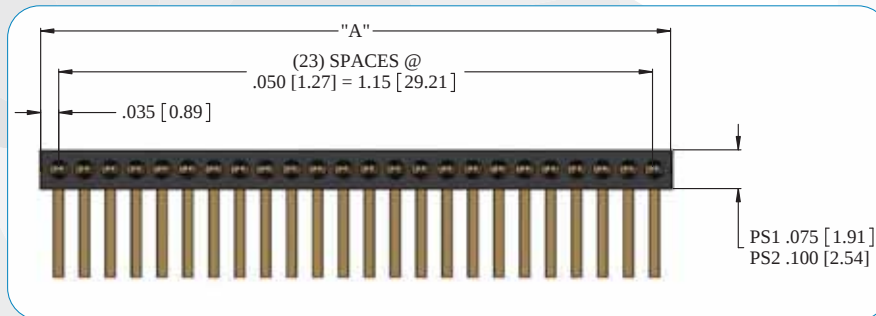
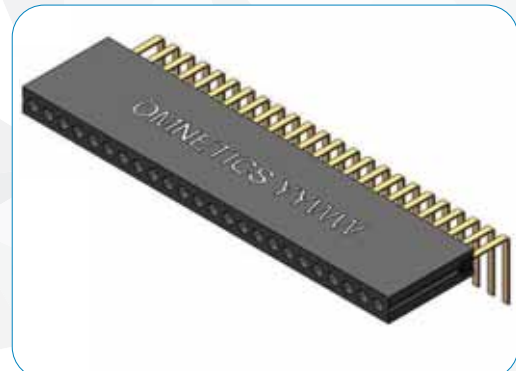
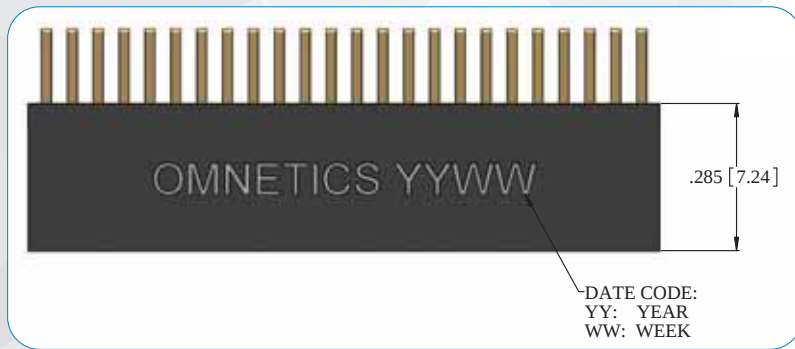
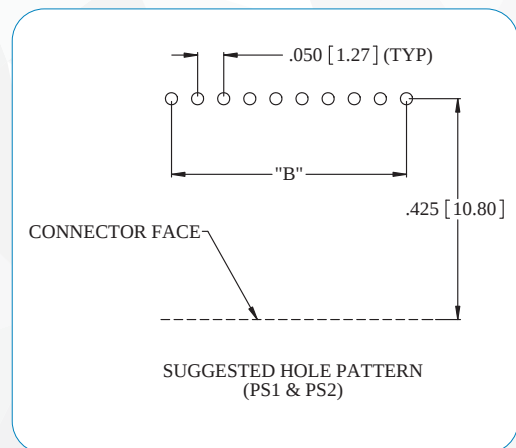
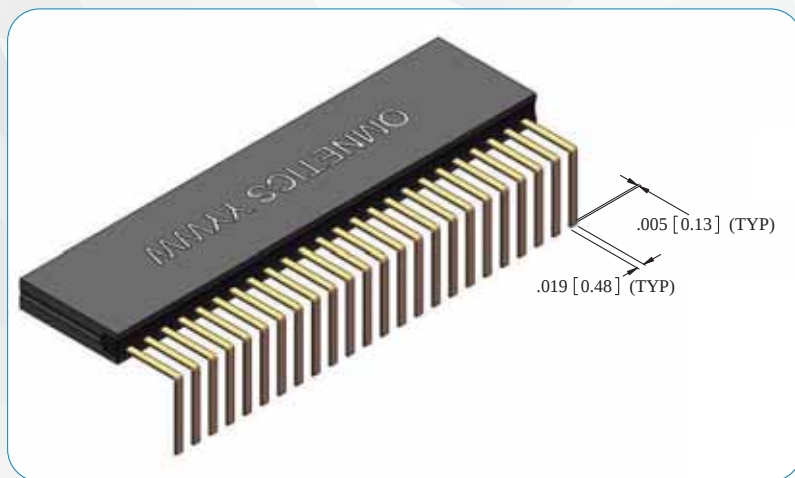
MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Micro Strip

PS1/PS2-CC LAYOUT

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DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length for PS1 @ .075" thick 2.42" (61.47) Maximum number of contact cavities is 48. Maximum length for PS2 @ .100" thick 3.02" (76.71) Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

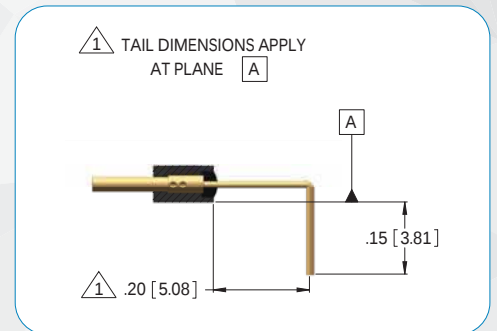
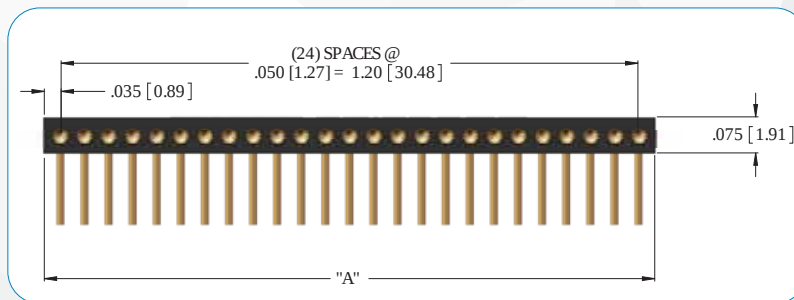
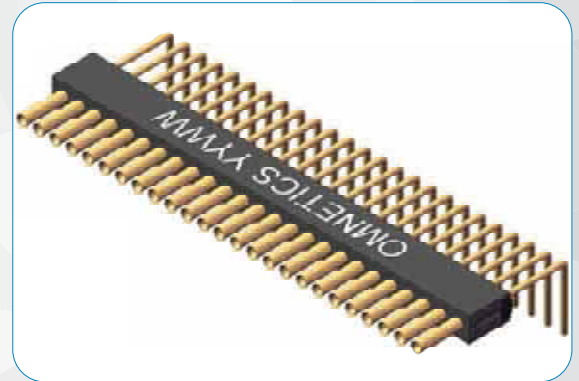
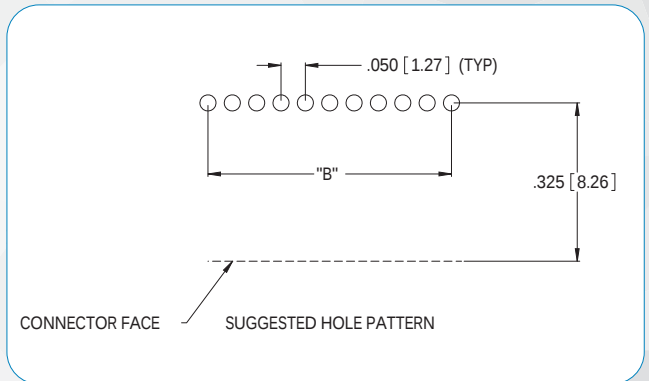
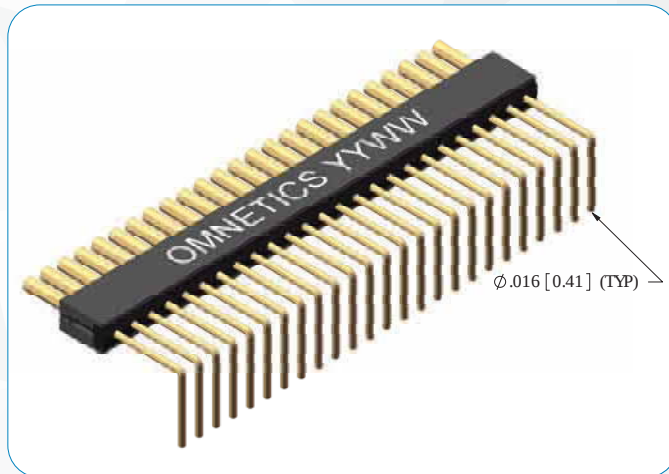
Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum hole pattern layout length for PS1 is 2.35" (59.69). Maximum hole pattern layout length for PS2 is 2.95" (74.93). Add .100" from center of mounting hole to first hole (if the first contact cavity is used for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-CC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" (3 contact cavities) for each mounting hole	
Add fixed end length	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" (1 contact cavity) for each latch	
Add .050" (1 contact cavity) for each guide post	
Add .150" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

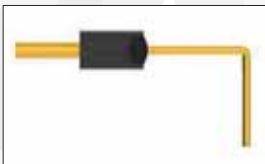
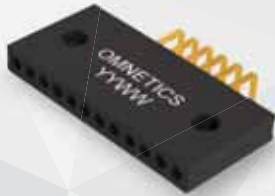
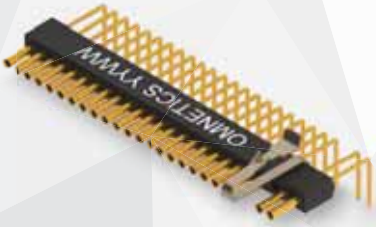
Notes: Maximum hole layout length 2.35" (59.69).

Add .100" from center of mounting hole to first hole (if the first contact cavity is for a guide post or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

LONG THRU HOLE TAIL (TYPE CC) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick	02 - 48	CC	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
PS2 PIN CONNECTOR .100" thick		 	 
SSB SOCKET CONNECTOR			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
			 
			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			 
			M MOUNTING HOLE
			 
			HT HIGH TEMP
EXAMPLES:			RoHS RoHS COMPLIANT
			
PS1 -06-CC-M			
			
SSB-24-CC-LT			
			
SSB-24-CC-LE			
			
SSB-17-CC-M-GS			

Single Row Micro Strip

SOLDERCUP (TYPE SS)

Single Row Micro Strip connectors are available in soldercup configurations. The soldercup tails are commonly used within hand soldering applications, and/or specific wire based devices that require a small robust connector during one of the final phases of production. These connectors feature Omnetics' gold plated Flex Pin contact system that conforms to the requirements of MIL-DTL-83513.

Micro Strip connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations and accept 26 AWG or smaller stranded wire.



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ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

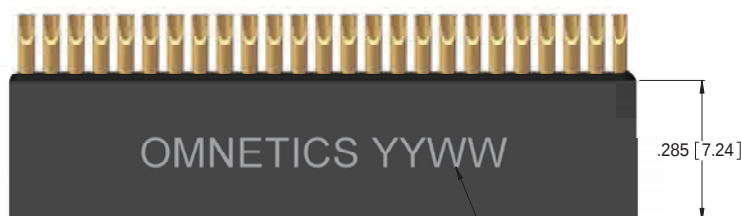
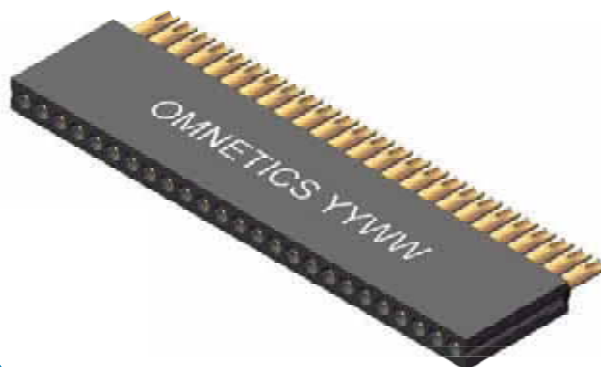
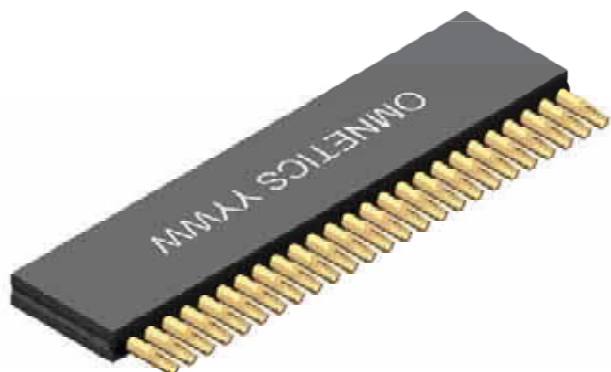
MATERIAL SPECIFICATIONS

- Standard Socket Soldercup Termination: Hard Gold Plated per ASTM B488
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Soldercup Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin Soldercup Termination: Hard gold plated per ASTM B488
- RoHS Socket Soldercup Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

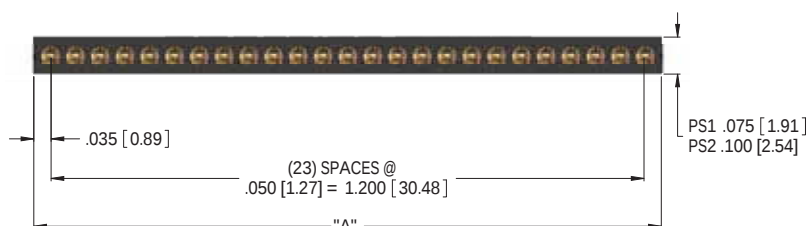
Single Row Micro Strip

PS1/PS2-SS LAYOUT

28



DATE CODE:
YY: YEAR
WW: WEEK



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each latch

Add 1 contact cavity for each guide post hole

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .050"

Add .150" (3 contact cavities) for each mounting hole

Add fixed end length constant

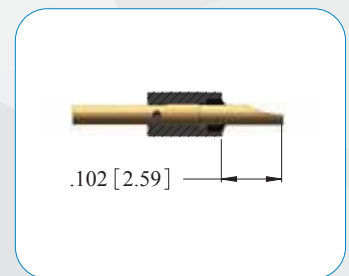
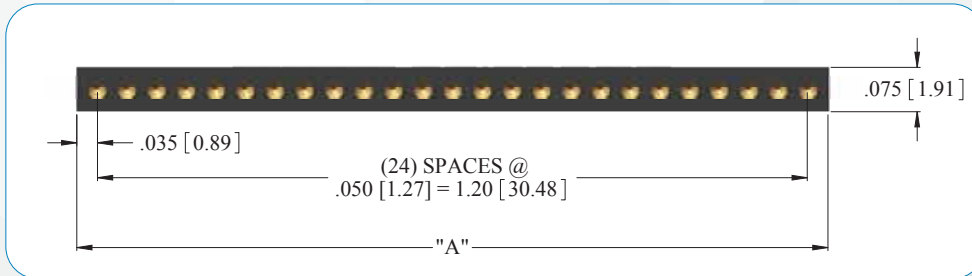
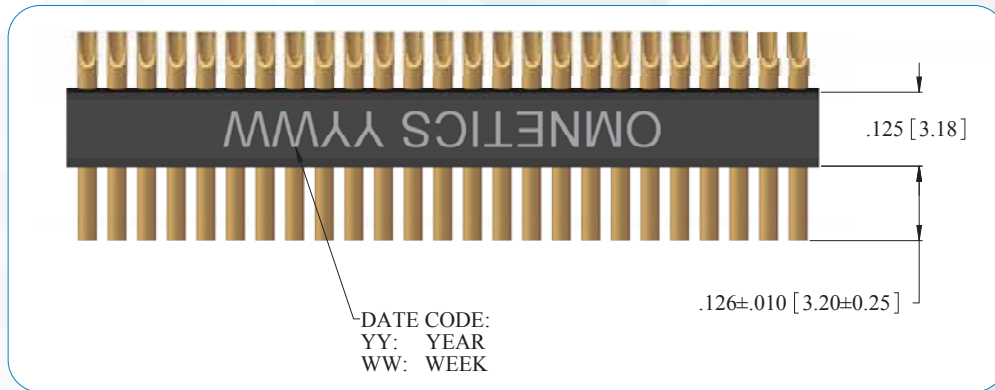
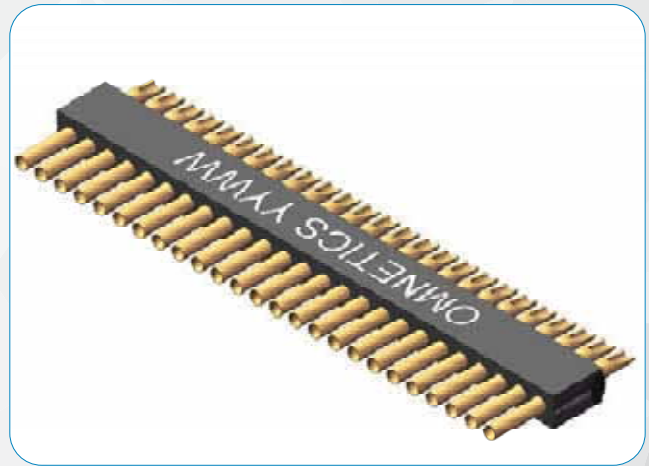
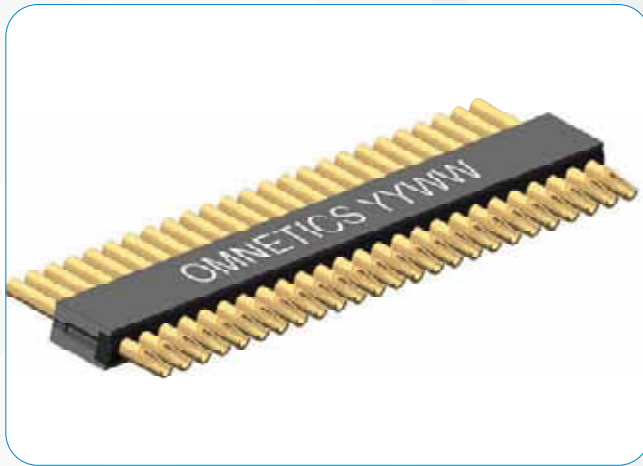
Total Length (Dimension A)

.070"

Notes: Maximum length for PS1 @ .075" thick 2.42" (61.47) Maximum number of contact cavities is 48. Maximum length for PS2 @ .100" thick 3.02" (76.71). Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-SS LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each latch

Add 1 contact cavity for each guide post

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .050"

Add .150" (3 contact cavities) for each mounting hole

Add fixed end length

Total Length (Dimension A)

.070"

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SOLDER CUP (TYPE SS) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick	02 - 48	SS	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
PS2 PIN CONNECTOR .100" thick			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
SSB SOCKET CONNECTOR			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
EXAMPLES:			M MOUNTING HOLE
			HT HIGH TEMP
PS1-10-SS-LT	SSB-24-SS-LT		RoHS RoHS COMPLIANT
SSB-24-SS-LE	SSB-17-SS-M-GS		

Single Row Micro Strip

PRE-WIRED/CABLE (TYPE WD/WC)

Pre-wired Single Row Micro Strip connectors are available with 26 AWG to 32 AWG stranded wire. These assemblies are crimped using proprietary semi-automated crimping systems. Due to their small size and precision required to make these quality crimps, hand crimping is not an option. Pre-crimped wires and contacts are potted in place, further protecting the integrity of the crimp joint. Building these parts to order allows for maximum flexibility in wire type, size and color coding. Commercial Off The Shelf (COTS) versions are also available with 18" of color coded 26 AWG Teflon wire for quick turn around.

These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations, and accept 26 AWG or smaller stranded wire.



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ELECTRO-MECHANICAL SPECS

- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

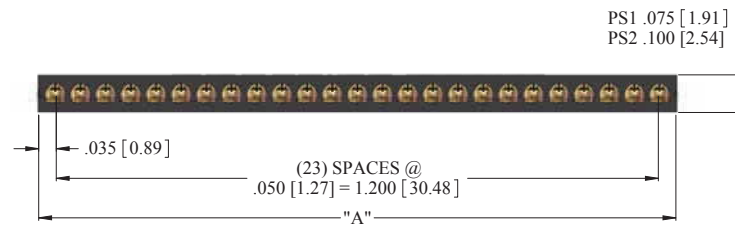
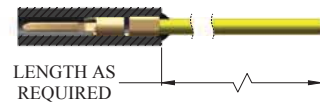
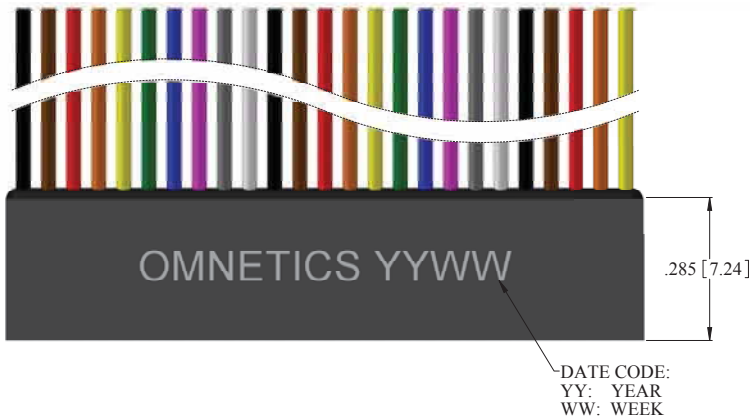
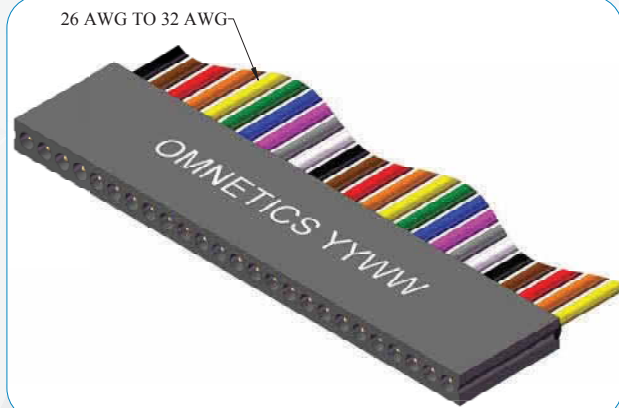
MATERIAL SPECIFICATIONS

- Standard Wire: 26 AWG, Teflon Insulated per NEMA-HP3
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Micro Strip

PS1/PS2-WD/WC LAYOUT

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DIMENSIONS FOR "A"

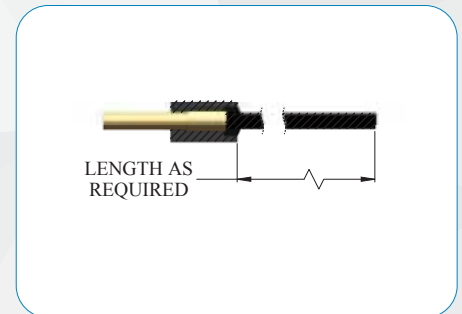
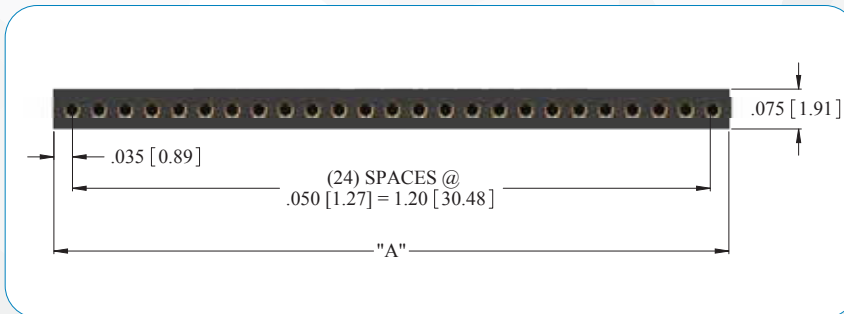
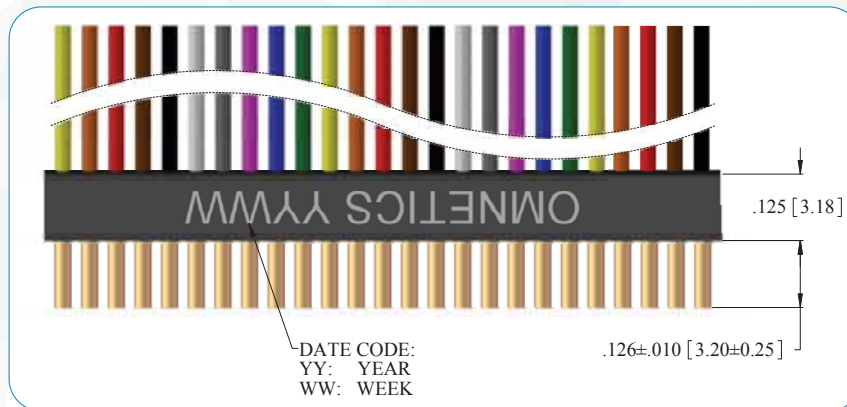
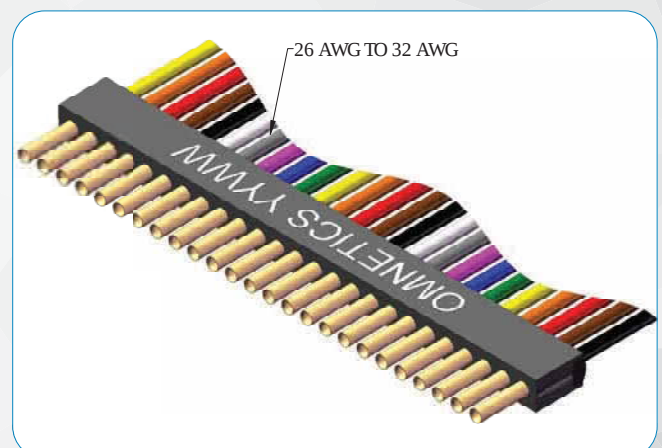
To determine connector length "A":

Add the total number of contacts	_____
Add 1 contact cavity for each latch	_____
Add 1 contact cavity for each guide post hole	_____
Total contact cavities	_____
Subtract 1 from the total to get the number of cavity spaces and multiply by .050"	_____
Add .150" (3 contact cavities) for each mounting hole	_____
Add fixed end length constant	_____
Total Length (Dimension A)	_____

Notes: Maximum length for PS1 @ .075" thick 2.42" (61.47) Maximum number of contact cavities is 48. Maximum length for PS2 @ .100" thick 3.02" (76.71). Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

SSB-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each latch

Add 1 contact cavity for each guide post

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .050"

Add .150" (3 contact cavities) for each mounting hole

Add fixed end length

Total Length (Dimension A)

.070"

Notes: Maximum length 2.42" (61.47). Maximum number of contact cavities is 48. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Micro Strip

PRE-WIRED/CABLE (TYPE WD/WC) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	WIRE LENGTH	COLOR CODED	COMMON OPTIONS
PS1 PIN CONNECTOR Standard: .075" thick	02 - 48	WD DISCRETE WIRES	18.00 =18.00" STANDARD	C 10 REPEATING COLORS PER MIL-STD 681  Y ALL OTHER WIRE COLORS	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES  
PS2 PIN CONNECTOR .100" thick		TW TWISTED WIRES	XX.XX CUSTOM LENGTH i.e. 23.4"		LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)  
SSB SOCKET CONNECTOR 		WC CABLE	26 AWG Standard/ MAX		LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)  
EXAMPLES:  					M MOUNTING HOLE  
PS1/PS2-11-WD-18.00-C-M-GS		SSB-24-WD-18.0-C-LT			HT HIGH TEMP RoHS RoHS COMPLIANT 
SSB-17-WD-18.0-C-M-GS					

Dual Row Micro Strip

HORIZONTAL SMT (TYPE AA)

Horizontal SMT Micro Strip connectors offer an extremely low profile package that is well suited to pick and place methods. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with fixing/retention jack screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.



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ELECTRO-MECHANICAL SPECS

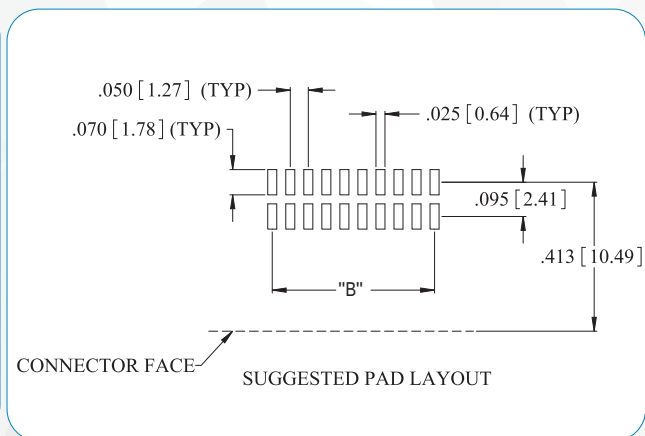
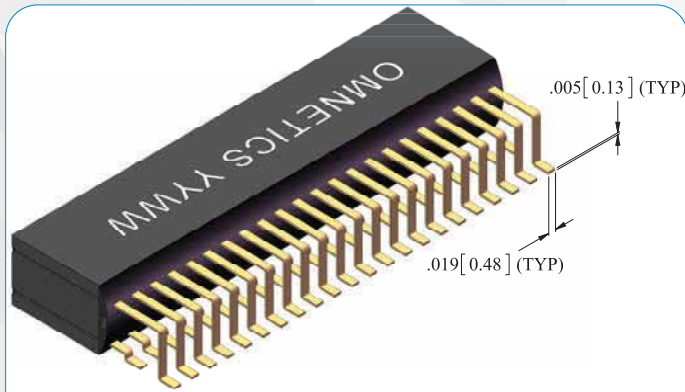
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200°C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

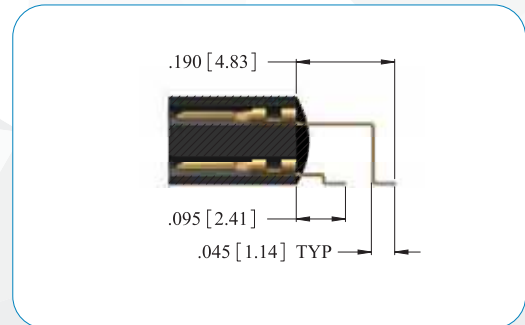
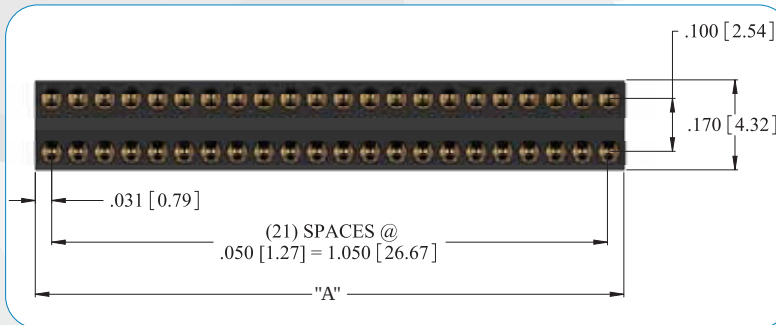
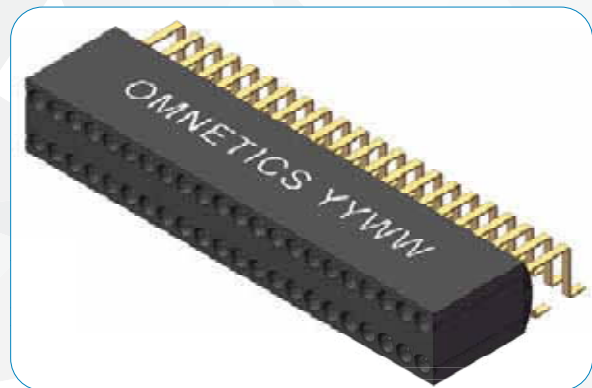
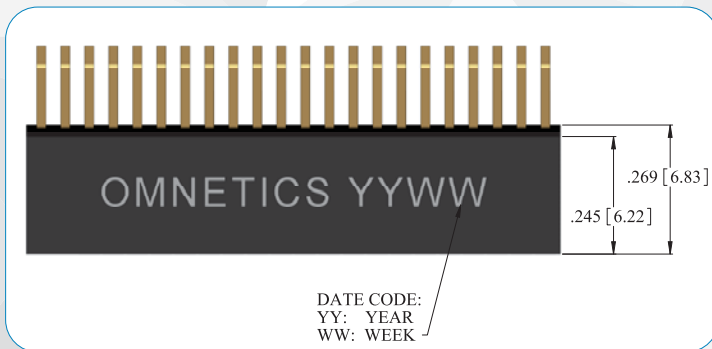
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRP-AA LAYOUT



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DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

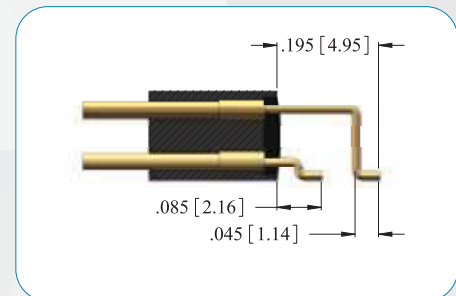
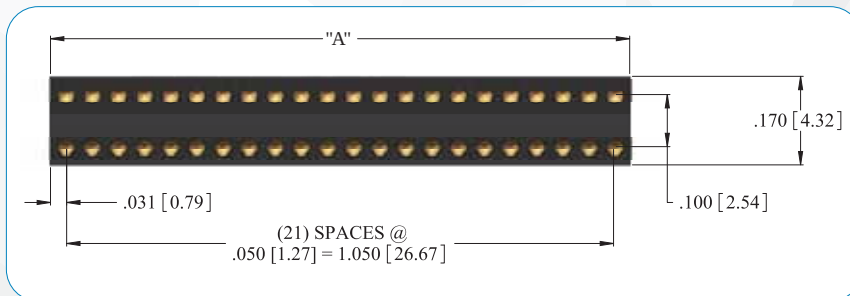
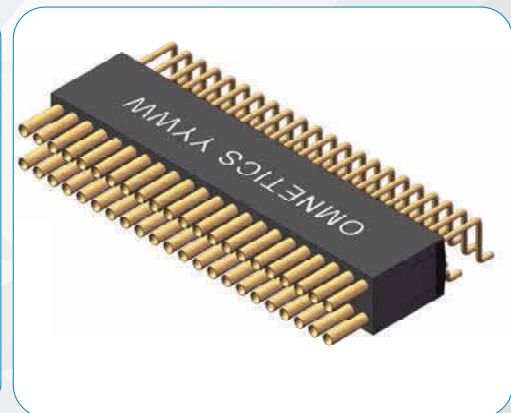
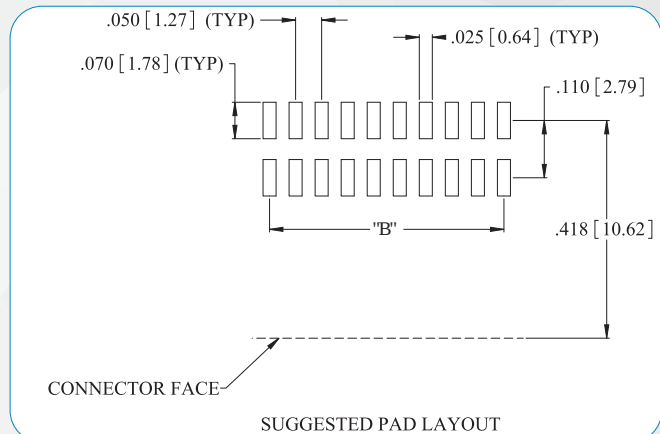
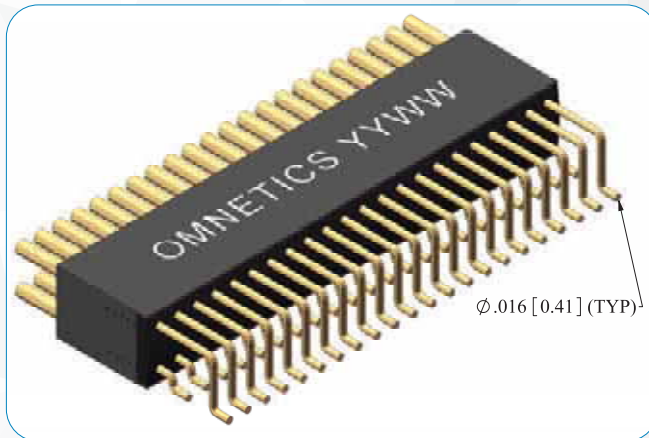
Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

DRS-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

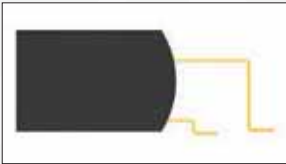
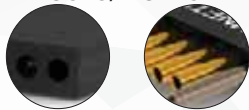
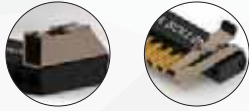
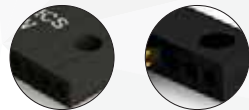
Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
DRP PIN CONNECTOR 	02 - 64	AA 	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES  LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)  LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)  M MOUNTING HOLE  CSR CENTER SCREW RECEPTACLE - PIN SIDE ESR END SCREW RECEPTACLE - PIN SIDE  CRS CENTER RETAINING SCREW - SOCKET SIDE ERS END RETAINING SCREW - SOCKET SIDE  CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE  HT HIGH TEMP
DRS SOCKET CONNECTOR 			
EXAMPLES:			
 DRP-44-AA	 DRS-43-AA-LT		
 DRS-43-AA-LE	 DRS-32-AA-M		

RoHS
RoHS COMPLIANT



Dual Row Micro Strip

STRAIGHT TAIL (TYPE DD)

The Dual Row .050" Micro Strip connectors are configured with simple straight tails (Integral or Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits. The straight solid tails are also commonly used in ultra fine wrap terminations, such as electrophysiology. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. Available with fixing/retention jack screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations. Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

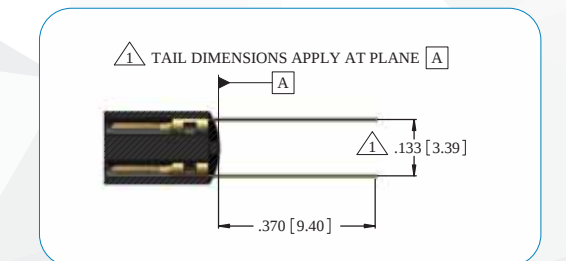
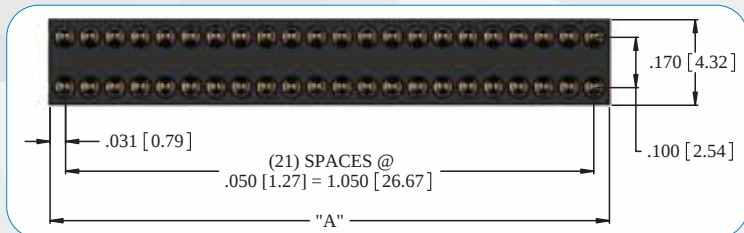
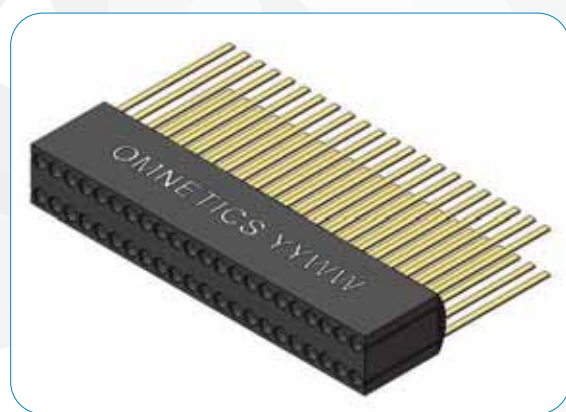
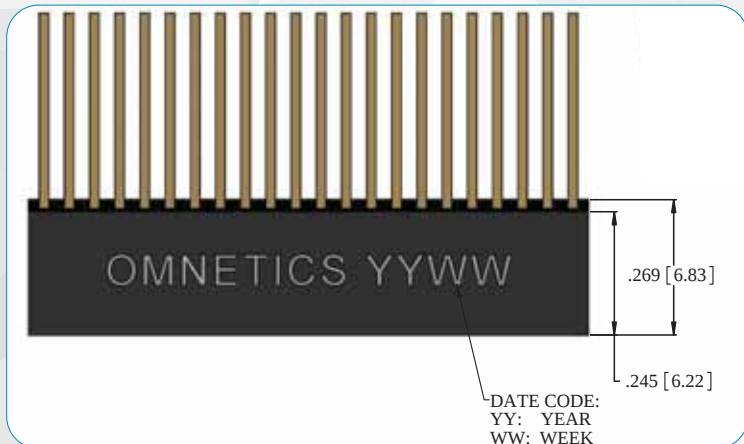
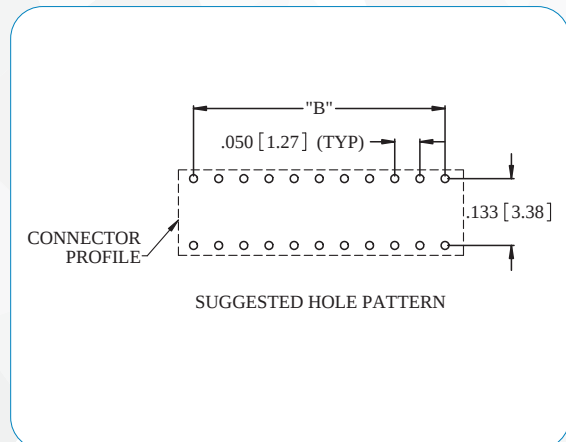
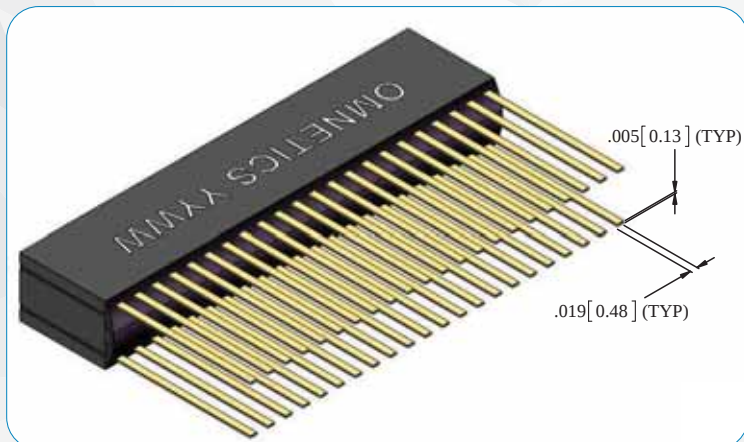
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRP-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

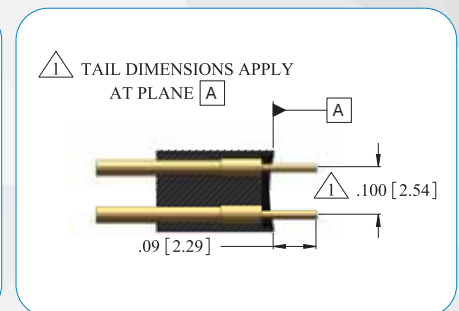
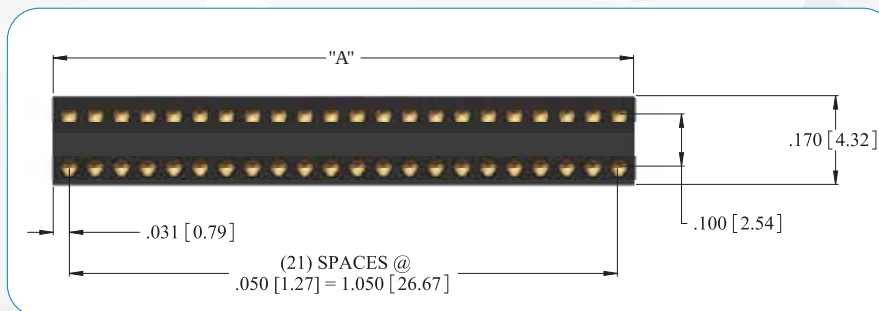
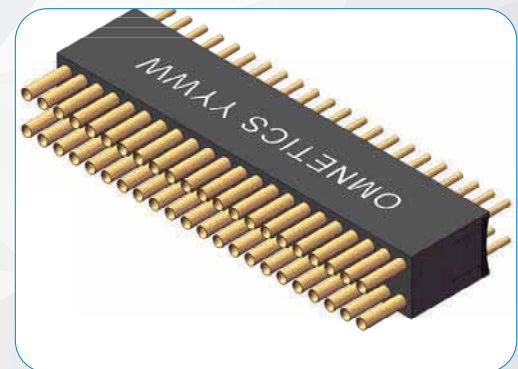
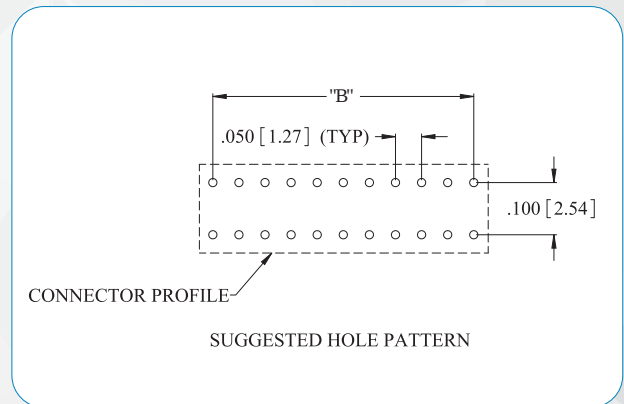
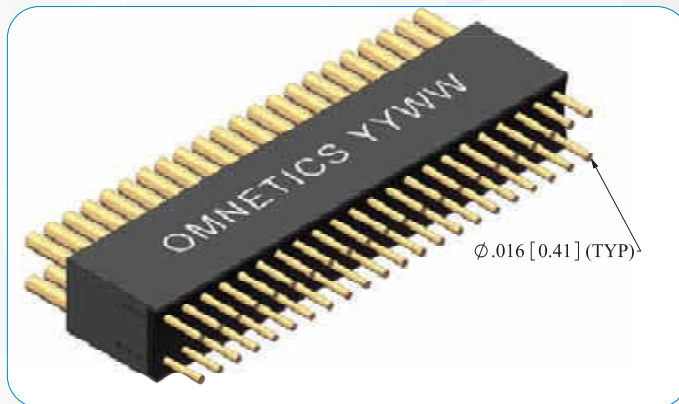
Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

DRS-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

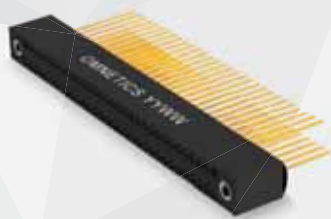
Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
DRP PIN CONNECTOR	02 - 64	DD	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
DRS SOCKET CONNECTOR			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			M MOUNTING HOLE
			CSR CENTER SCREW RECEPTACLE - PIN SIDE ESR END SCREW RECEPTACLE - PIN SIDE
			CRS CENTER RETAINING SCREW - SOCKET SIDE ERS END RETAINING SCREW - SOCKET SIDE
			CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE
			HT HIGH TEMP

EXAMPLES:



DRP-52-DD-ESR



DRS-43-DD-LT



DRS-32-DD-M

RoHS
RoHS COMPLIANT



Dual Row Micro Strip

FLEX TAIL (TYPE FF)

Flex mount Micro Strip connectors are a low profile ruggedized connector on .050" (1.27 mm) centerlines. The SMT tails are formed together in an hourglass shape, allowing a double sided flex circuit to slide between the 2 rows of leads. The spring tension holds the flex in place during the soldering process. These durable light weight connectors are suitable for the most demanding applications. Available with retaining pin screws as well as mounting holes suitable for PCB and flex mounting. They feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.



Flex design and installation service is also available from Omnetics. Please contact us for more information.

ELECTRO-MECHANICAL SPECS

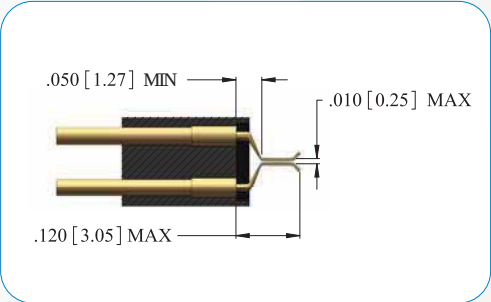
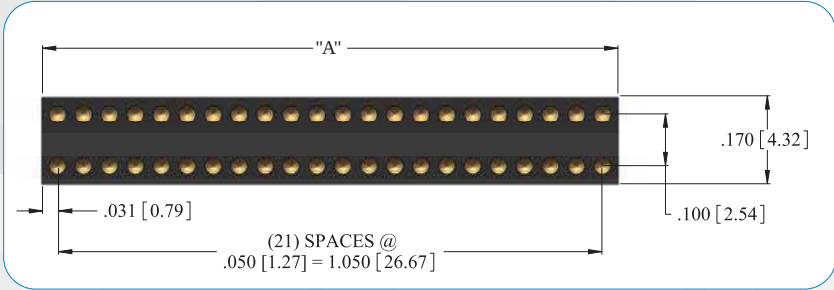
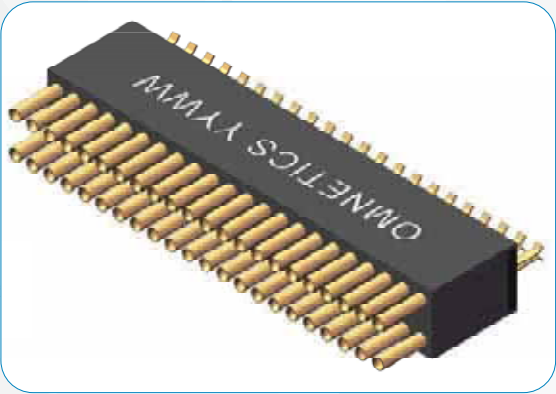
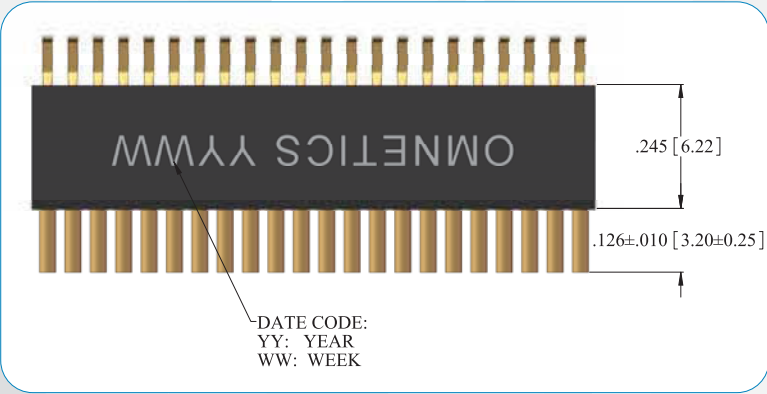
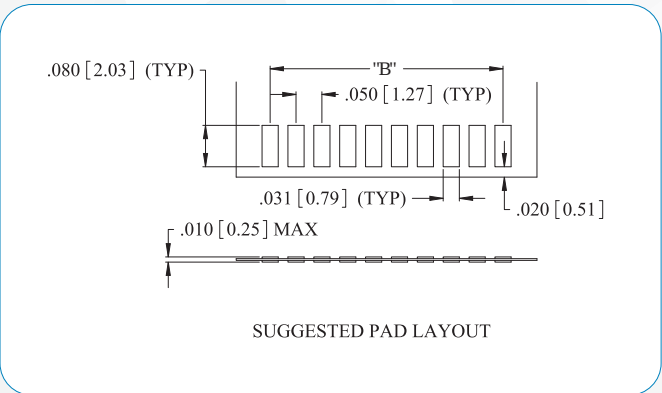
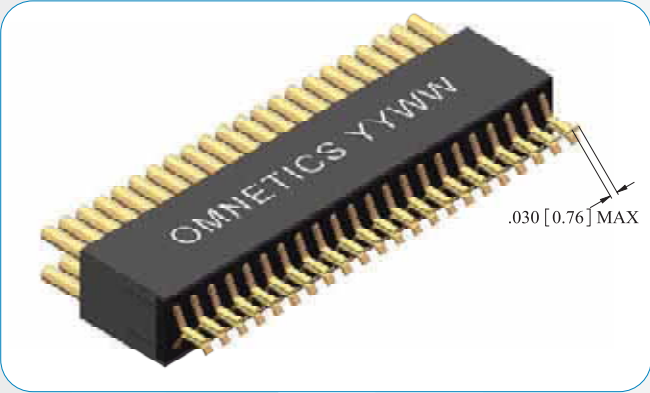
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRS-FF LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

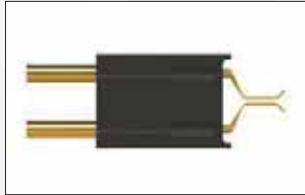
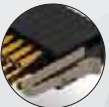
Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

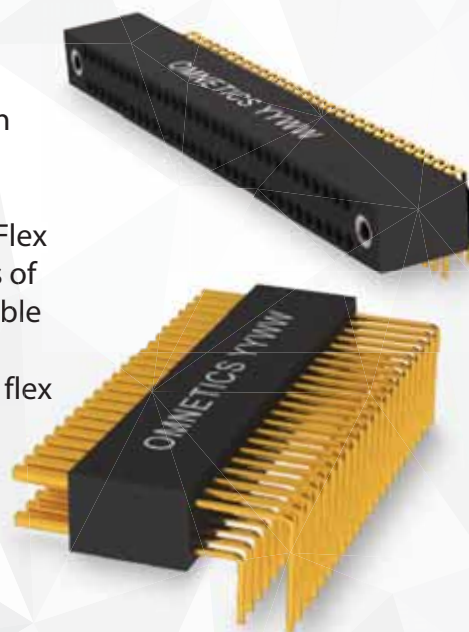
FLEX TAIL (TYPE FF) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
DRS SOCKET CONNECTOR	02 - 64	FF 	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES  LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)  LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)  CRS CENTER RETAINING SCREW - SOCKET SIDE  ERS END RETAINING SCREW - SOCKET SIDE  HT HIGH TEMP RoHS RoHS COMPLIANT 
EXAMPLES:  			
DRS-43-FF-LE	DRS-43-FF-LT		

Dual Row Micro Strip

LONG/SHORT ALT. THRU-HOLE (TYPE H2)

The Dual Row Micro Strip connectors have contacts arranged on .050" (1.27 mm) centerlines. The thru-hole tails are arranged in a .050" x .100" grid, allowing for space for traces and annular rings. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These durable light weight connectors are suitable for the most demanding applications. They are available with retaining screws as well as mounting holes suitable for PCB and flex mounting.



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These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.

ELECTRO-MECHANICAL SPECS

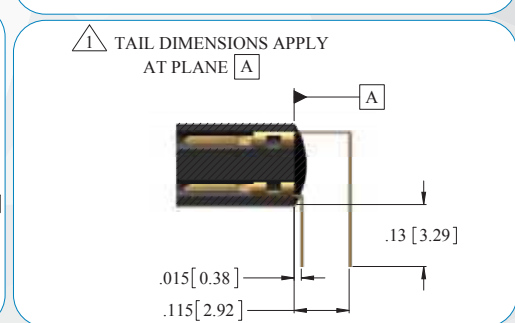
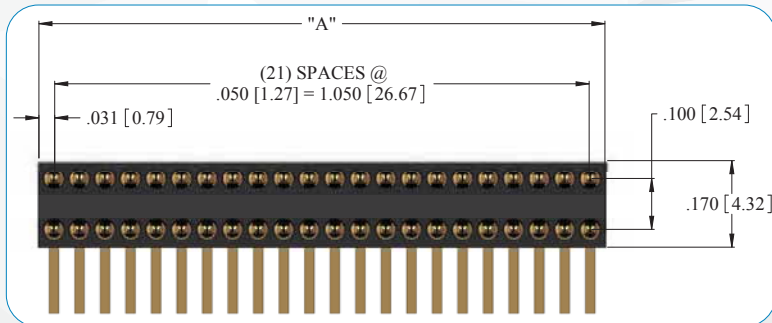
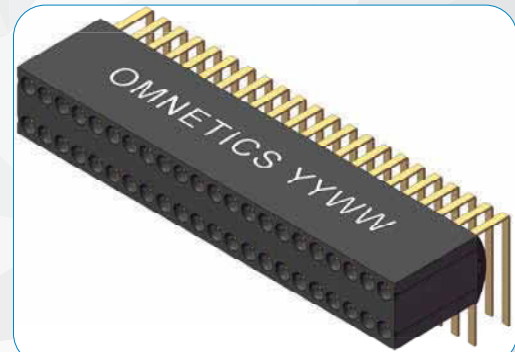
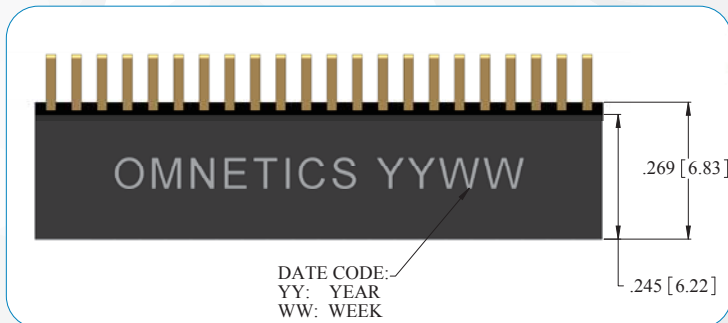
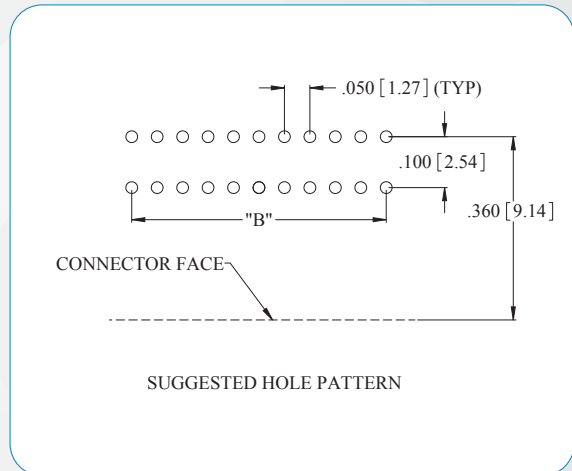
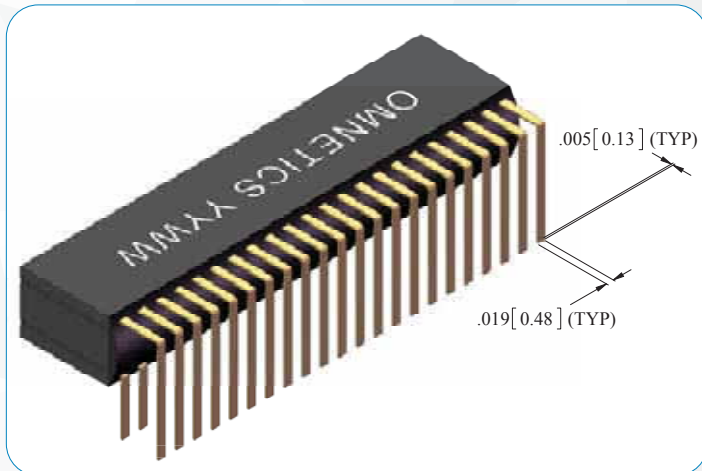
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRP-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

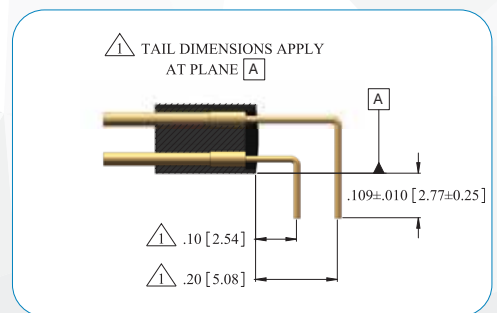
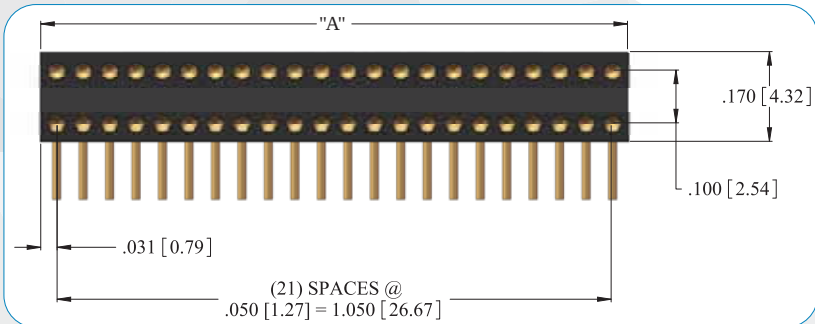
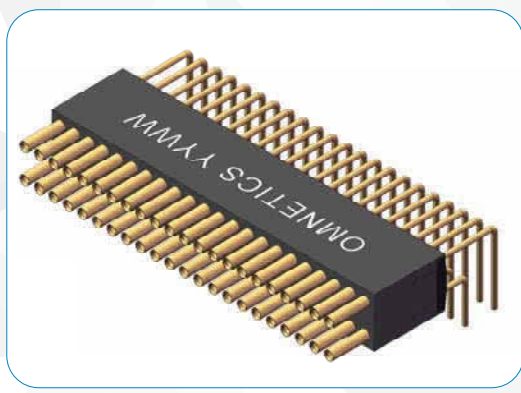
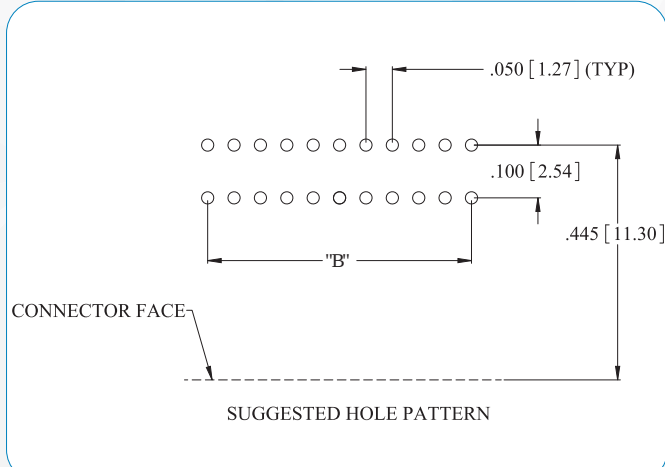
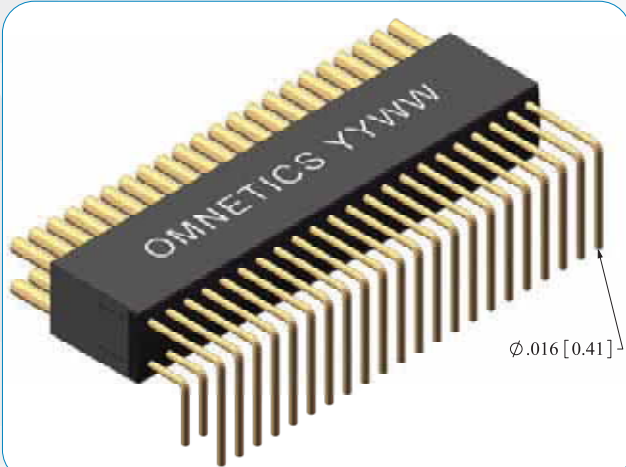
Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

DRS-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

SHORT/LONG ALT. THRU HOLE TAIL (TYPE H2) ORDERING GUIDE

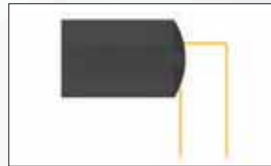
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
--------	---------------	------------------	----------------

DRP
PIN CONNECTOR

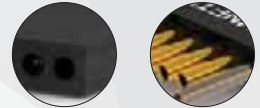
02 - 64

H2

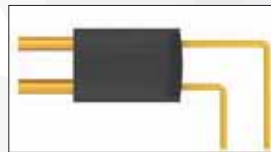
G GUIDE POST/HOLE
GS MULTIPLE GUIDE POSTS/HOLES



LE LATCH (END MOUNT)
LES MULTIPLE LATCHES (END MOUNT)



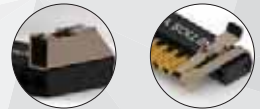
DRS
SOCKET CONNECTOR



LT LATCH (TOP MOUNT)
LTS MULTIPLE LATCHES (TOP MOUNT)



M
MOUNTING HOLE



CSR CENTER SCREW RECEPTACLE - PIN SIDE

ESR END SCREW RECEPTACLE - PIN SIDE



CRS CENTER RETAINING SCREW - SOCKET SIDE

ERS END RETAINING SCREW - SOCKET SIDE



CJP CENTER JACK POST - PIN SIDE

EJP END JACK POST - PIN SIDE



HT
HIGH TEMP

EXAMPLES:



DRP-52-H2-ESR



DRS-43-H2-LT



DRS-43-H2-LE



DRS-32-H2-M

RoHS
RoHS COMPLIANT



Dual Row Micro Strip

SOLDER CUP (TYPE SS)

The solder cup tails are commonly used for hand soldering applications and for specific wire-based devices that require a small robust connector during one of the final phases of production. These connectors feature Omnetics' gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. Available with fixing/retention jack screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations and accept 26 AWG or smaller stranded wire.



ELECTRO-MECHANICAL SPECS

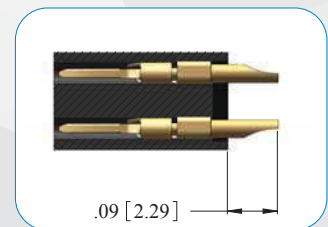
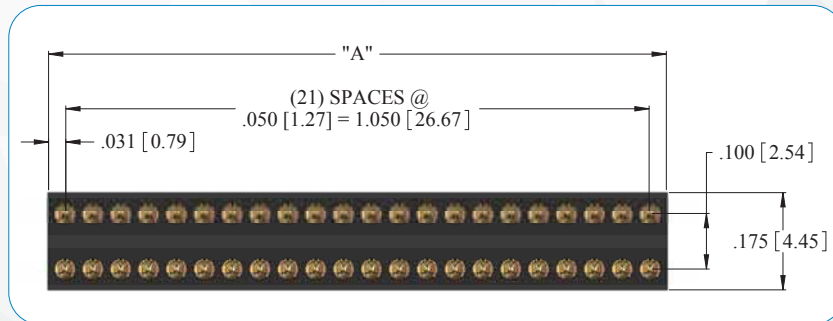
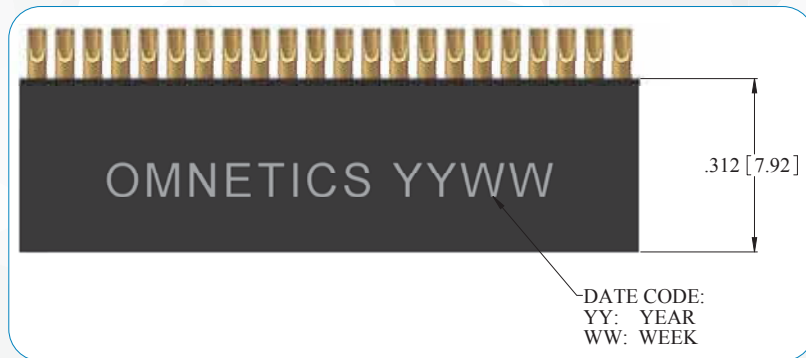
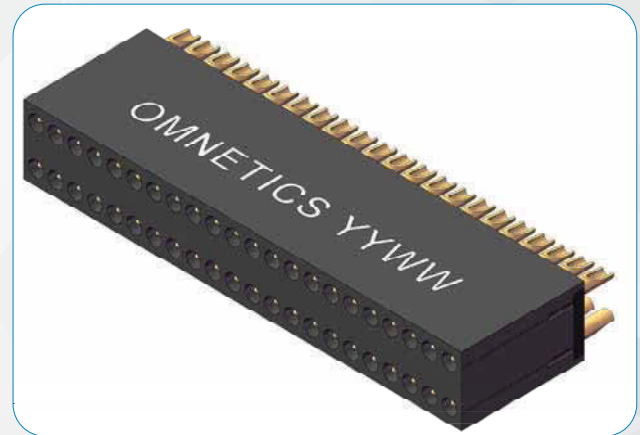
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket Soldercup Termination: Hard Gold Plated per ASTM B488
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Soldercup Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin Soldercup Termination: Hard gold plated per ASTM B488
- RoHS Socket Soldercup Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRP-SS LAYOUT



DIMENSIONS FOR "A"

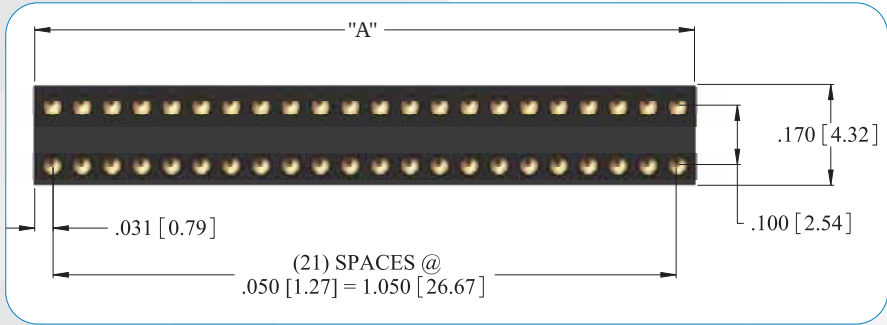
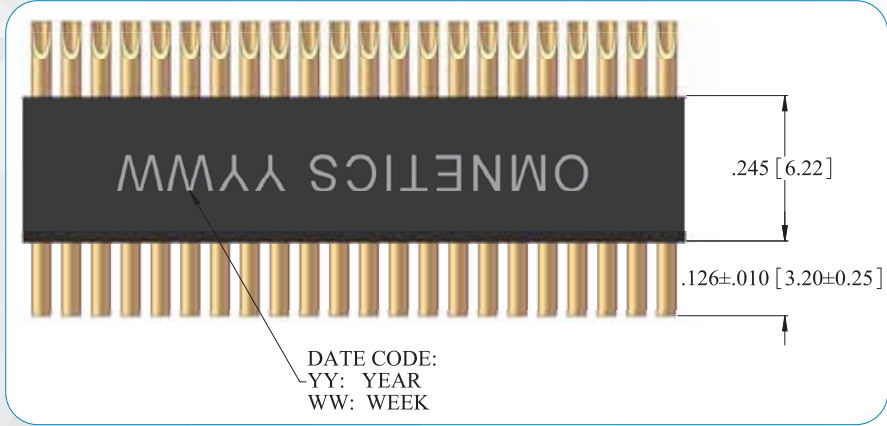
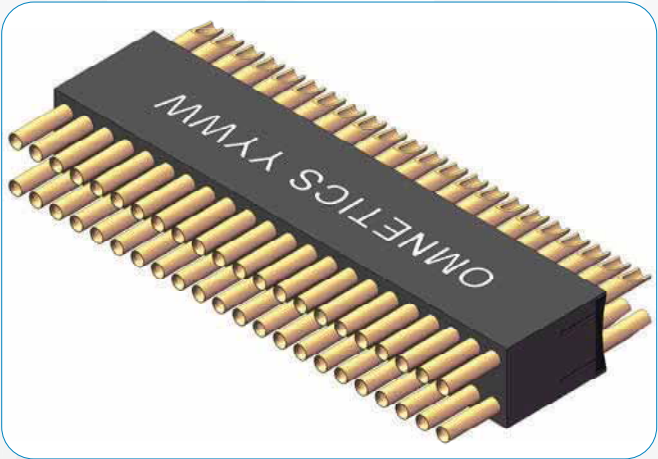
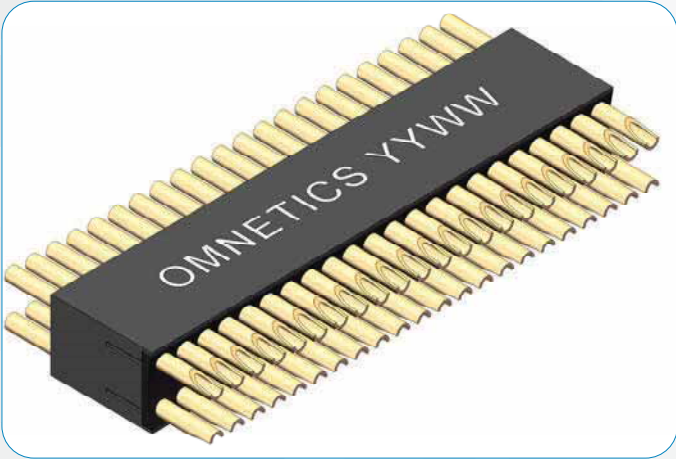
To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post in the same row	
Total contact cavities in a single row	
Subtract 1 from the total to get the number of cavity spaces and multiply by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A):	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

DRS-SS LAYOUT



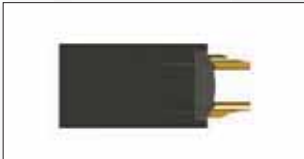
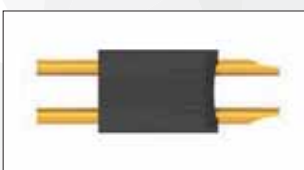
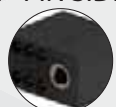
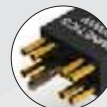
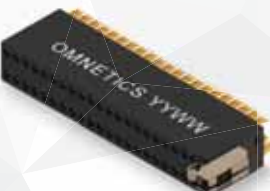
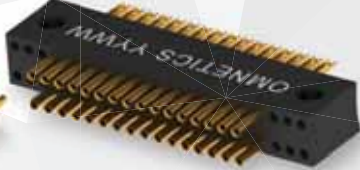
DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Subtract 1 from the total to get the number of cavity spaces and multiply by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	
Total Length (Dimension A)	.062"

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

SOLDERCUP (TYPE SS) ORDERING GUIDE

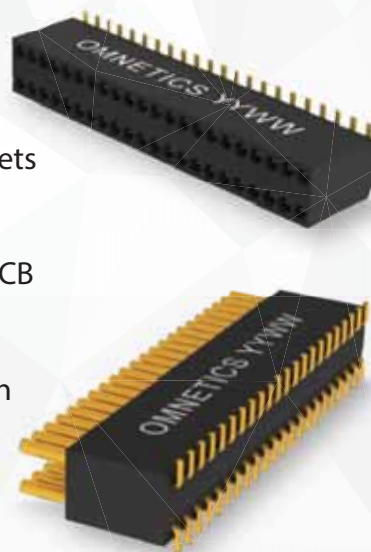
SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
DRP PIN CONNECTOR 	02 - 64	SS  	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES   LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)   LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)   M MOUNTING HOLE   CSR CENTER SCREW RECEPTACLE - PIN SIDE ESR END SCREW RECEPTACLE - PIN SIDE   CRS CENTER RETAINING SCREW - SOCKET SIDE ERS END RETAINING SCREW - SOCKET SIDE   CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE   HT HIGH TEMP
DRS SOCKET CONNECTOR 			
EXAMPLES:  DRP-43-SS-LE		 DRS-43-SS-LT	
 DRS-43-SS-LE		 DRS-32-SS-M	

Dual Row Micro Strip

VERTICAL SMT (TYPE VV)

Vertical SMT Micro Strip connectors require a minimal amount of board space on flex circuits and rigid circuit boards. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with retaining screws as well as mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.



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ELECTRO-MECHANICAL SPECS

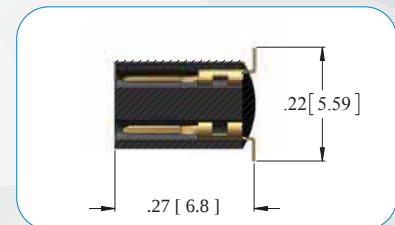
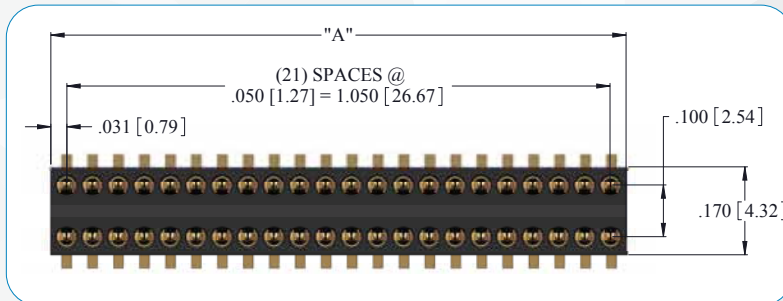
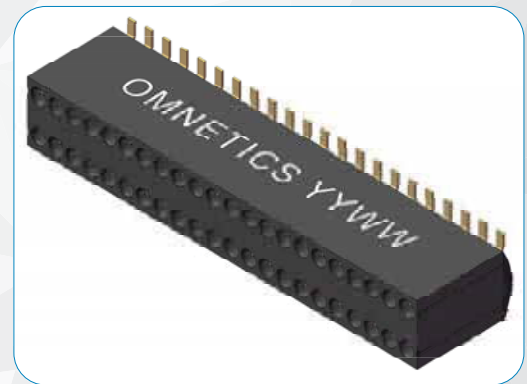
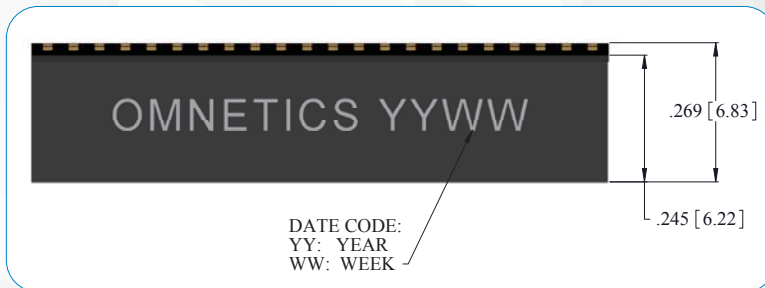
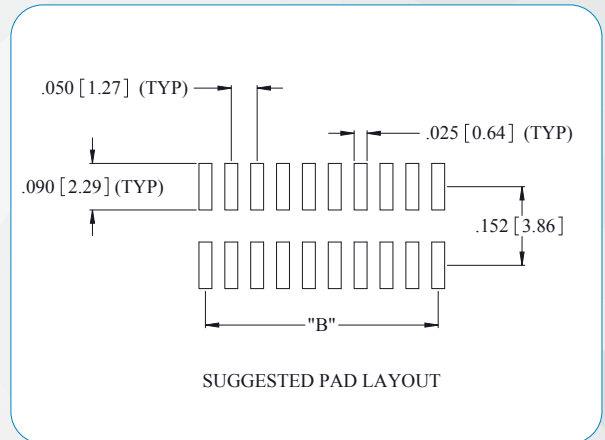
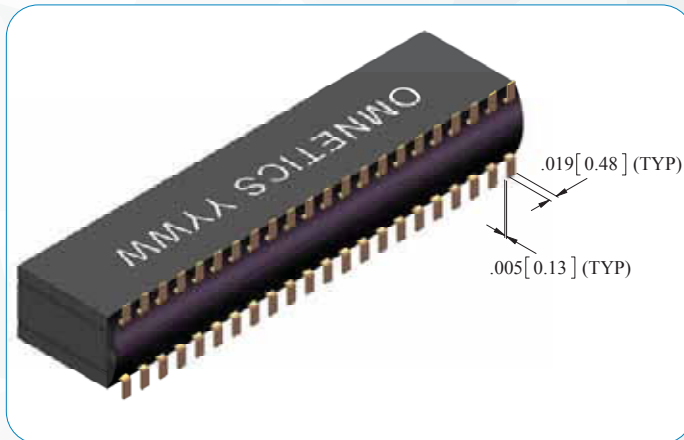
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRP-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

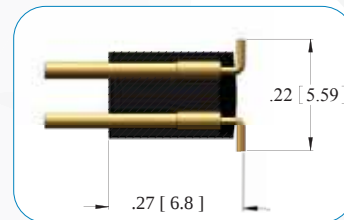
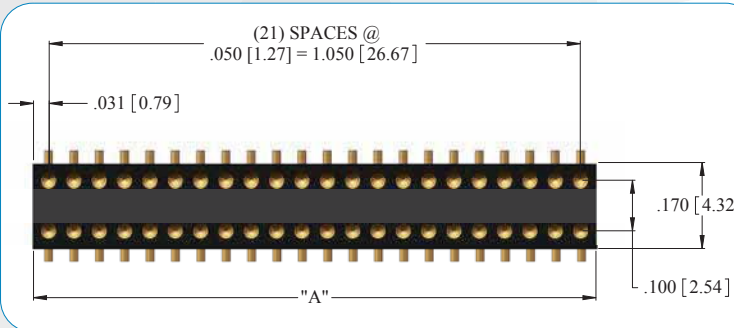
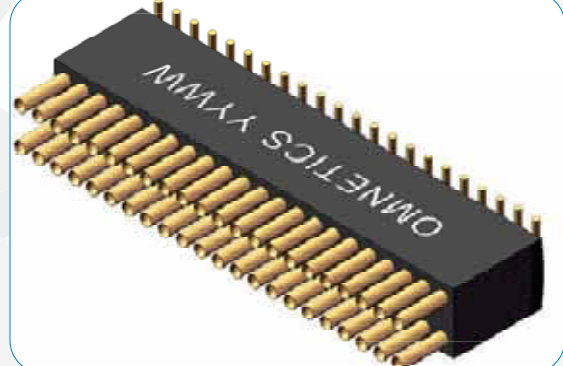
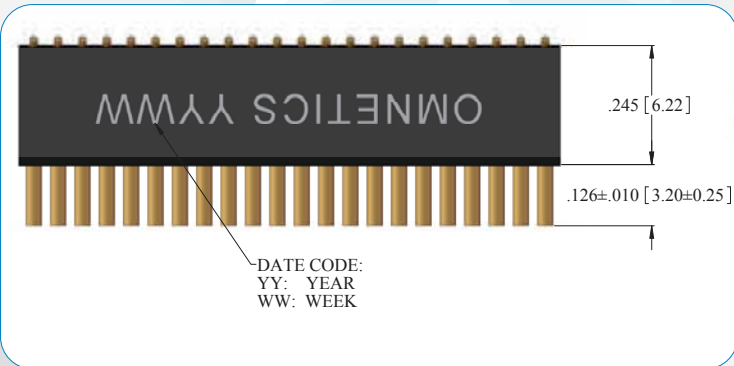
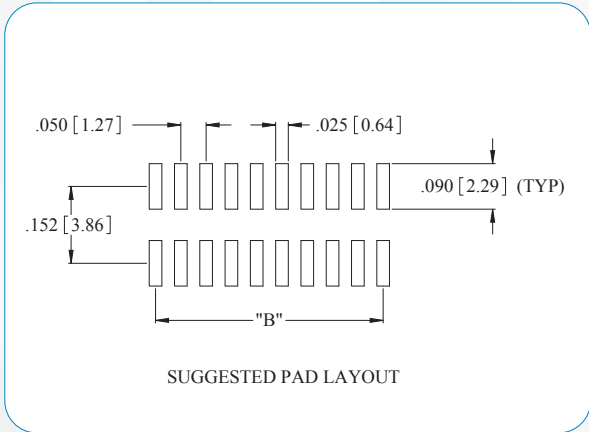
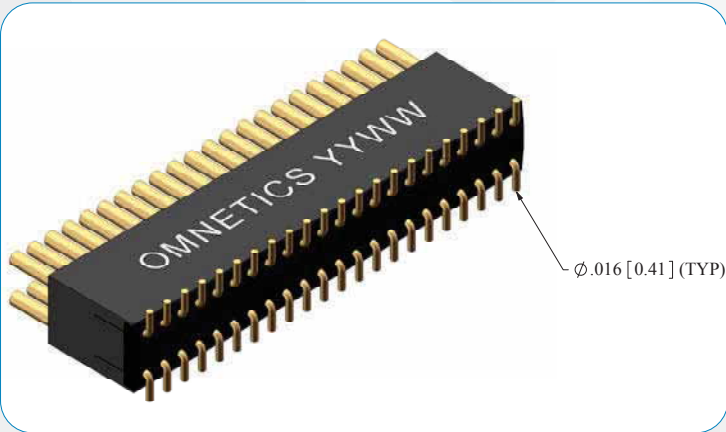
Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

DRS-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities in one row minus 1 by .050"	
If hardware features are within the contact area:	
Add .050" for each latch	
Add .050" for each guide post hole	
Add .100" for each screw receptacle	
Total Length (Dimension B)	

Notes: Maximum length 1.55" (39.37). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

VERTICAL SMT (TYPE VV) ORDERING GUIDE

SERIES

OF CONTACTS

TERMINATION TYPE

COMMON OPTIONS

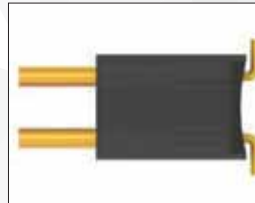
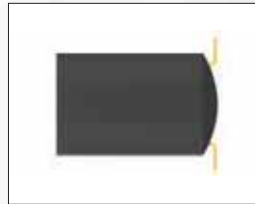
DRP
PIN CONNECTOR

02 - 64

VV



DRS
SOCKET CONNECTOR



EXAMPLES:



DRP-43-VV-LE



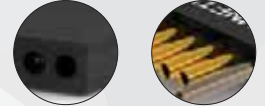
DRS-43-VV-LT



DRS-43-VV-LE

G GUIDE POST/HOLE

GS MULTIPLE GUIDE POSTS/HOLES



LE LATCH (END MOUNT)

LES MULTIPLE LATCHES
(END MOUNT)



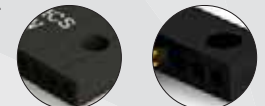
LT LATCH (TOP MOUNT)

LTS MULTIPLE LATCHES (TOP MOUNT)



M

MOUNTING HOLE



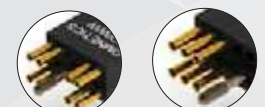
CSR CENTER SCREW RECEPTACLE - PIN
SIDE

ESR END SCREW RECEPTACLE - PIN SIDE



CRS CENTER RETAINING SCREW -
SOCKET SIDE

ERS END RETAINING SCREW - SOCKET
SIDE



CJP CENTER JACK POST - PIN SIDE

EJP END JACK POST - PIN SIDE



HT

HIGH TEMP

RoHS

RoHS COMPLIANT



Dual Row Micro Strip

PRE-WIRED/CABLE (TYPE WD/WC)

Pre-wired Dual Row Micro Strip connectors are available with 26 AWG to 32 AWG stranded wire. These assemblies are crimped using proprietary semi-automated crimping systems. Due to the small size and precision required to make these quality crimps, hand crimping is not an option. Pre-crimped wires and contacts are potted in place, further protecting the integrity of the crimp joint. Building these parts to order allows for maximum flexibility in wire type, size and color coding. Commercial Off The Shelf (COTS) versions are also available with 18" of color coded 26 AWG Teflon for quick turn around.



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These connectors are available in standard sizes ranging from 2 through 64 positions as well as custom configurations.

ELECTRO-MECHANICAL SPECS

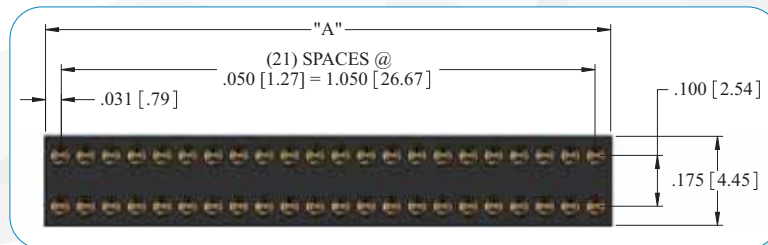
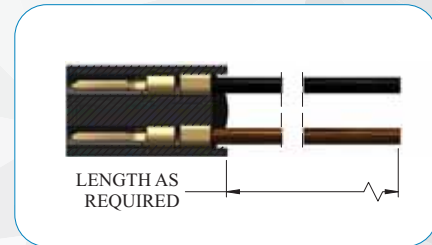
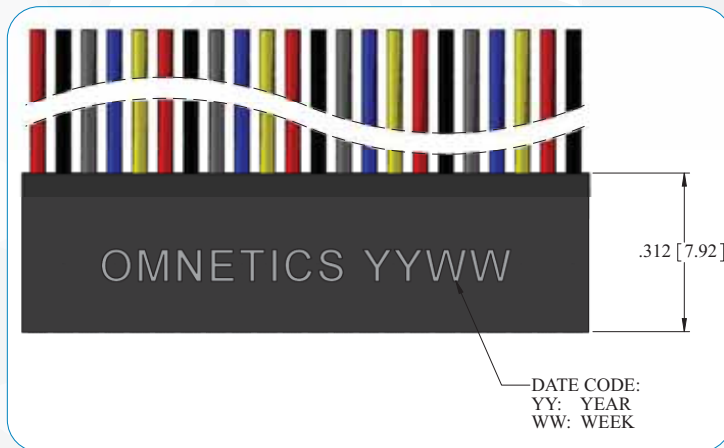
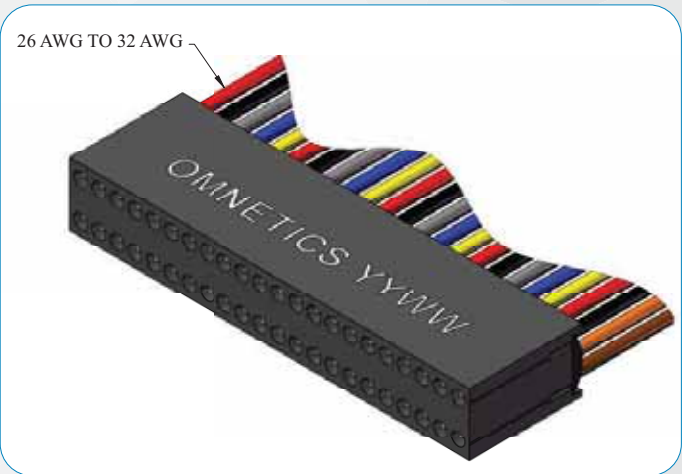
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Wire: 26 AWG, Teflon Insulated per NEMA-HP3
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Micro Strip

DRP-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post in the same row	
Total contact cavities in a single row	
Subtract 1 from the total to get the number of cavity spaces and multiply by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A):	

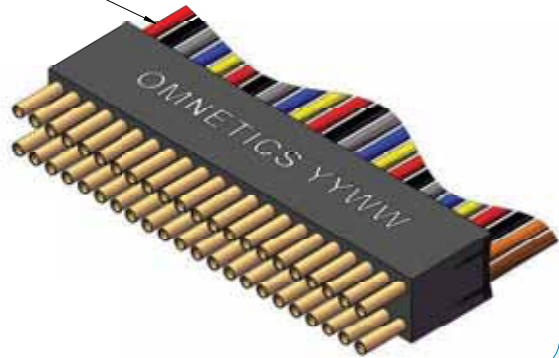
Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide posts and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

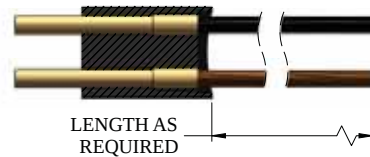
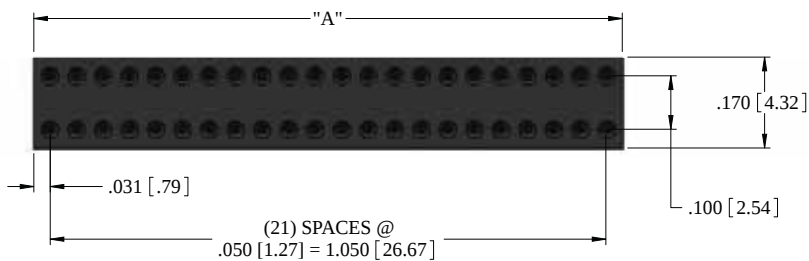
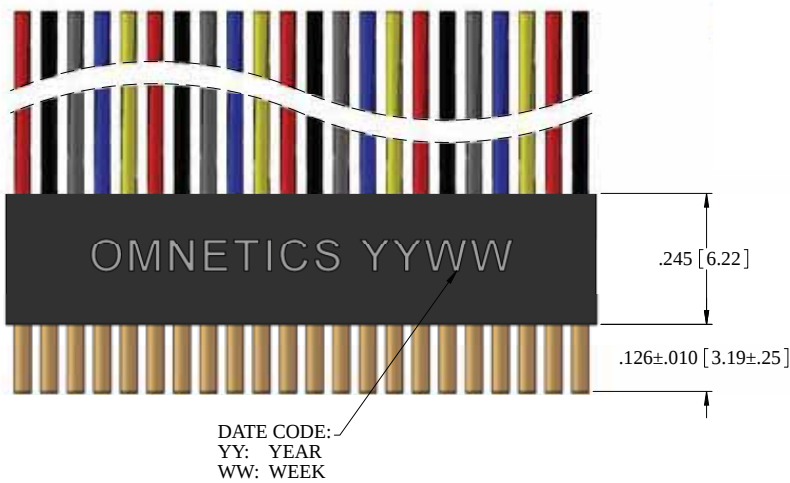
DRS-WD/WC LAYOUT



26 AWG TO 32 AWG



69



LENGTH AS
REQUIRED

DIMENSIONS FOR "A"

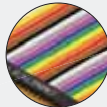
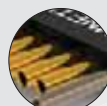
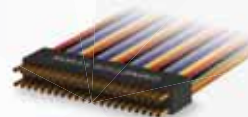
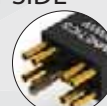
To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each latch in the same row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Subtract 1 from the total to get the number of cavity spaces and multiply by .050"	
Add .150" for each mounting hole	
Add .100" for each screw receptacle	
Add fixed end length constant	.062"
Total Length (Dimension A)	

Notes: Maximum length 1.85" (46.99). Maximum number of contact cavities is 64. Number of contacts must be reduced to accommodate hardware and mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Micro Strip

PRE-WIRED/CABLE (TYPE WD/WC) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	WIRE LENGTH	COLOR CODED	COMMON OPTIONS
DRP PIN CONNECTOR	02 - 64	WD DISCRETE WIRES	18.00 =18.00" STANDARD	C 10 REPEATING COLORS PER MIL-STD 681  Y ALL OTHER WIRE COLORS	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/ HOLES  
		TW TWISTED WIRES	XX.XX CUSTOM LENGTH i.e. 23.40 =23.40"		LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)  
DRS SOCKET CONNECTOR		WC CABLE	26 AWG Standard/MAX		LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)  
		WX MULTIPLE WIRE TYPES			M MOUNTING HOLE  
EXAMPLES:			 		CSR CENTER SCREW RECEPTACLE - PIN SIDE ESR END SCREW RECEPTACLE - PIN SIDE  
					CRS CENTER RETAINING SCREW - SOCKET SIDE ERS END RETAINING SCREW - SOCKET SIDE  
					CJP CENTER JACK POST - PIN SIDE EJP END JACK POST - PIN SIDE  
					HT HIGH TEMP RoHS RoHS COMPLIANT CS CUSTOMER SUPPLIED MATERIAL

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Dual Row Offset Micro Strip

HORIZONTAL SMT (TYPE AA)

Horizontal SMT Micro Strip connectors offer an extremely low profile package that is well suited to pick and place methods. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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ELECTRO-MECHANICAL SPECS

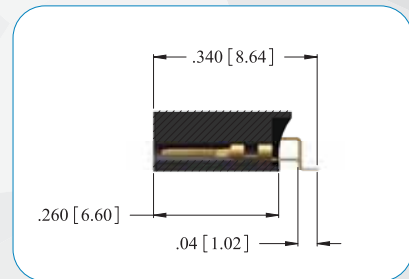
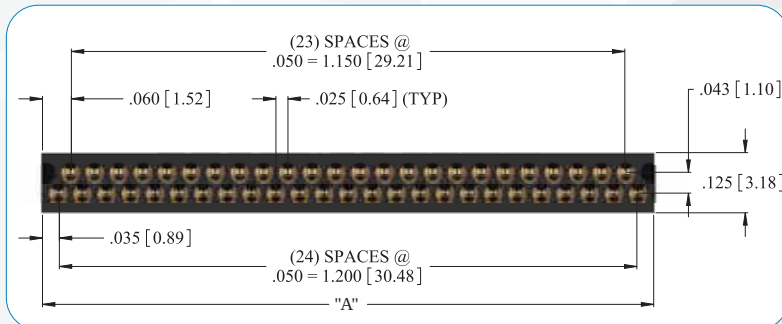
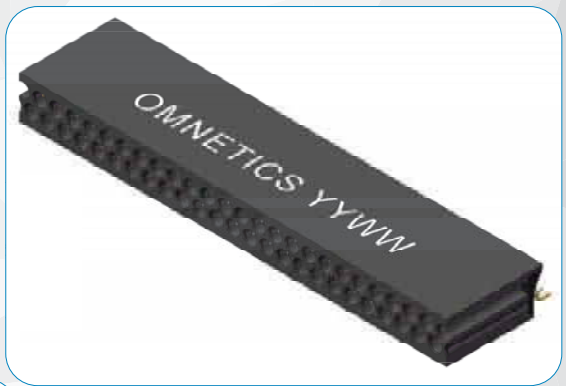
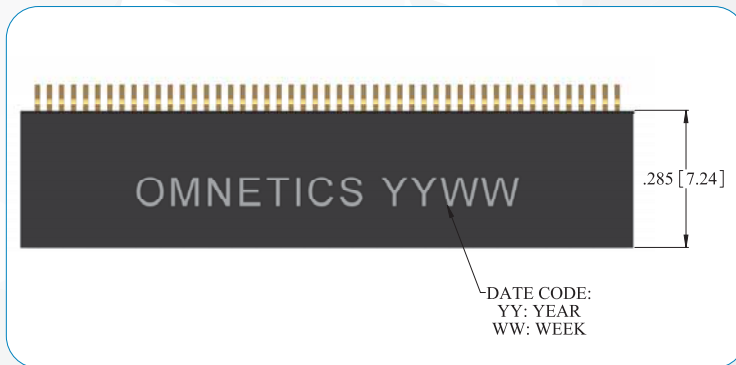
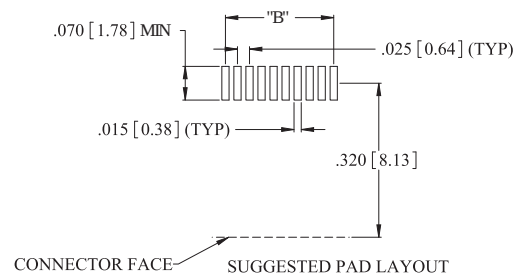
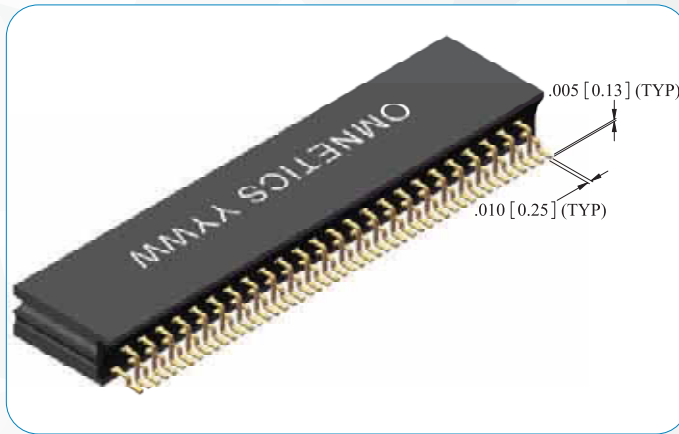
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"*
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

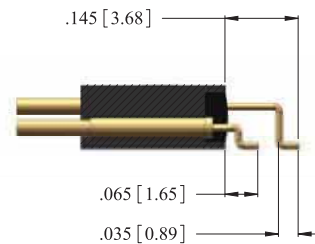
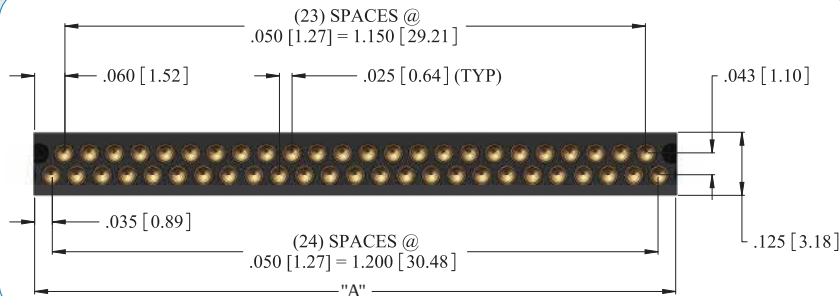
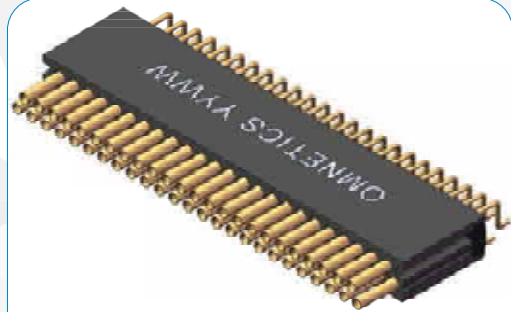
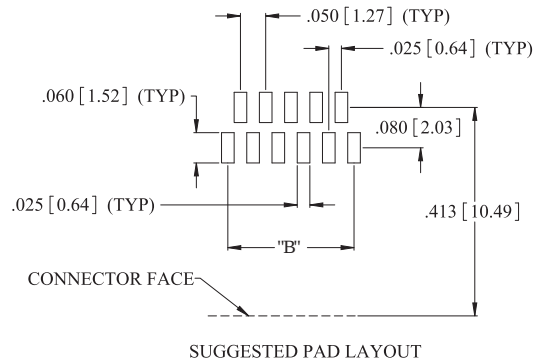
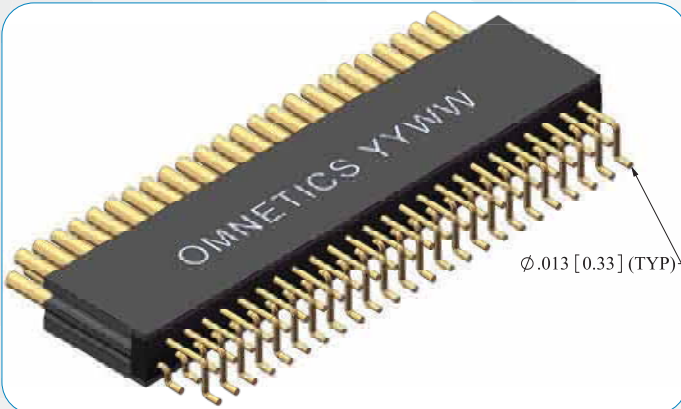
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SSO-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"*
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

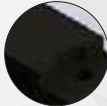
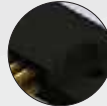
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PSM PIN CONNECTOR 	02 - 97	AA 	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES   LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)   LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)   M MOUNTING HOLE   HT HIGH TEMP
SSO SOCKET CONNECTOR 			
EXAMPLES:  	PSM-42-AA-LE	SSO-35-AA-M-GS	RoHS RoHS COMPLIANT 

Dual Row Offset Micro Strip

STRAIGHT TAIL (TYPE DD)

The Dual Row .050" Offset Micro Strip connectors are configured with simple straight tails (Integral or Crimped). They are suitable for vertical thru-hole mounting, fine pitched, or rigid flex circuits. The straight solid tails are also commonly used in ultra fine wrap terminations, such as electro physiology. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. They are available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations. Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

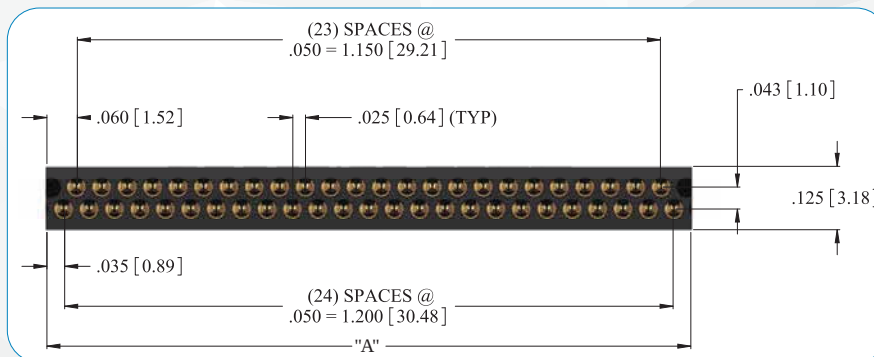
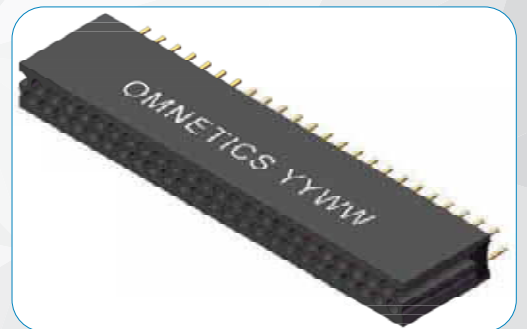
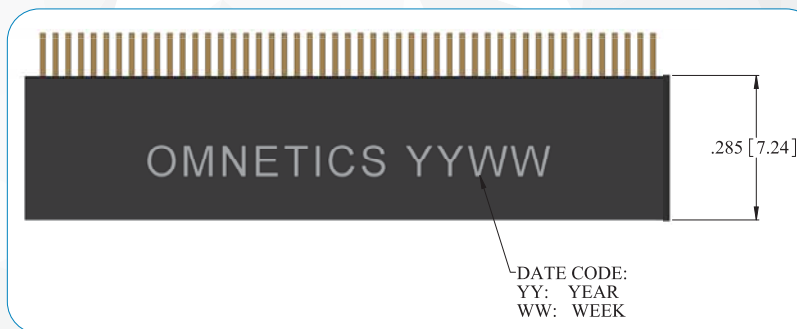
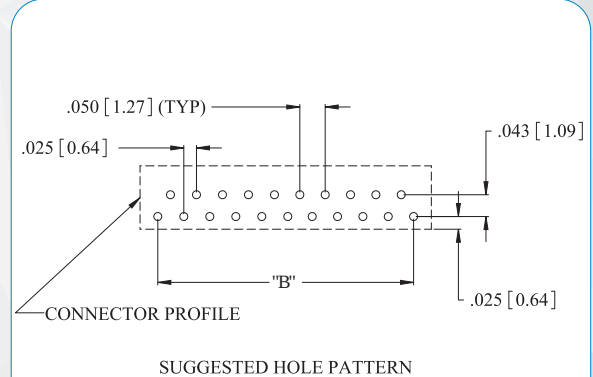
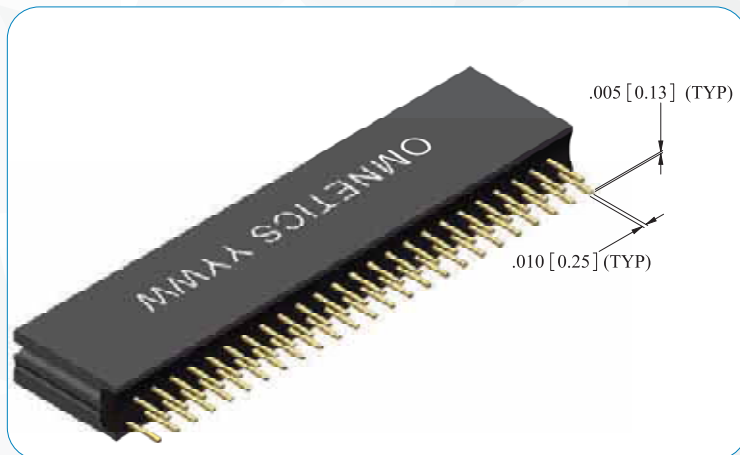
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

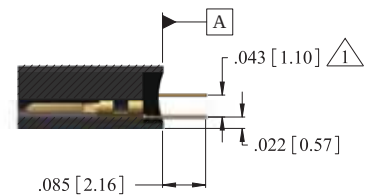
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-DD LAYOUT



1 TAIL DIMENSIONS APPLY AT PLANE A



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

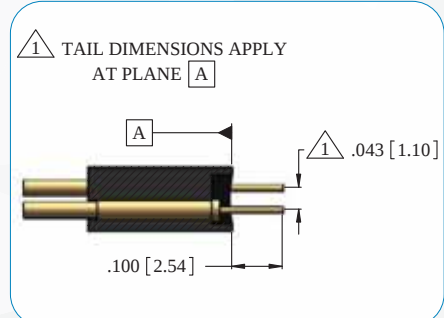
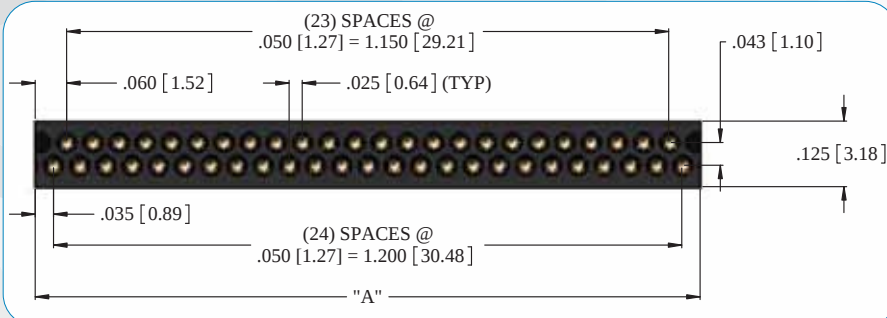
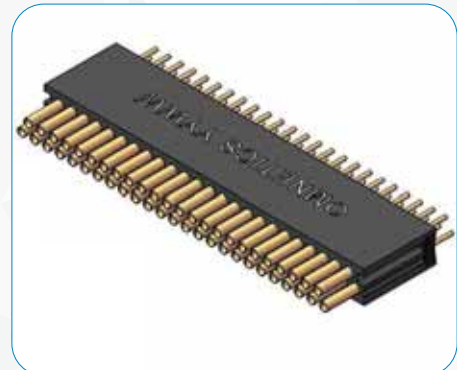
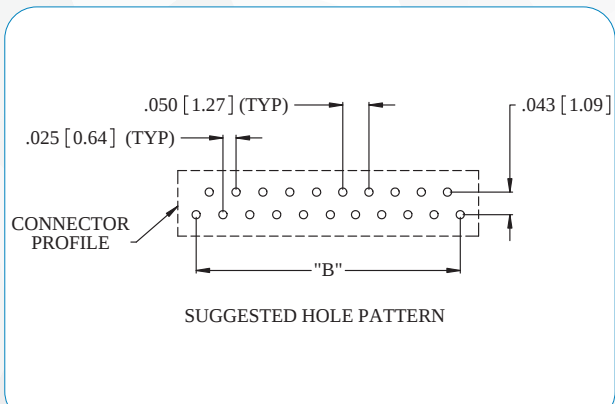
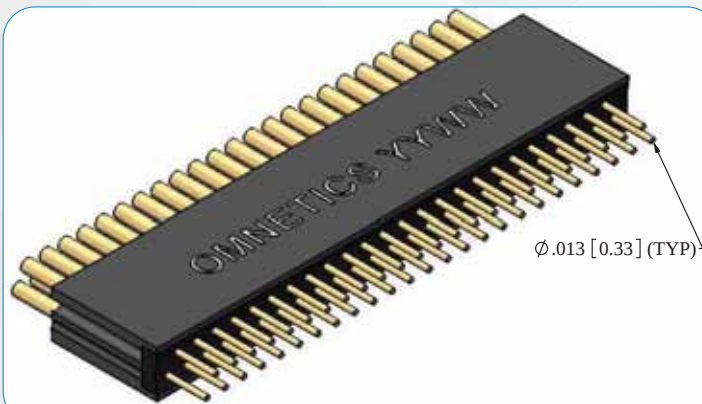
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SSO-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

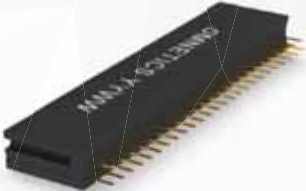
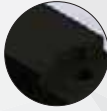
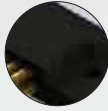
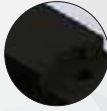
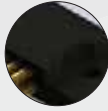
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PSM PIN CONNECTOR 	02 - 97	DD  	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES   LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)   LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)   M MOUNTING HOLE   HT HIGH TEMP   RoHS RoHS COMPLIANT 
SSO SOCKET CONNECTOR 			
EXAMPLES:  			
PSM-47-DD-LE			
	SSO-35-DD-M-GS		

Dual Row Offset Micro Strip

FLEX TAIL (TYPE FF)

Flex mount offset Micro Strip connectors are a low profile ruggedized connector on .050" (1.27 mm) centerlines. The SMT tails are formed together in an hourglass shape, allowing a double sided flex circuit to slide between the 2 rows of leads. The spring tension holds the flex in place during the soldering process. These durable light weight connectors are suitable for the most demanding applications. They are available with mounting holes suitable for PCB and flex mounting, and feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations. Flex design and installation service is also available from Omnetics. Please contact us for more information.



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ELECTRO-MECHANICAL SPECS

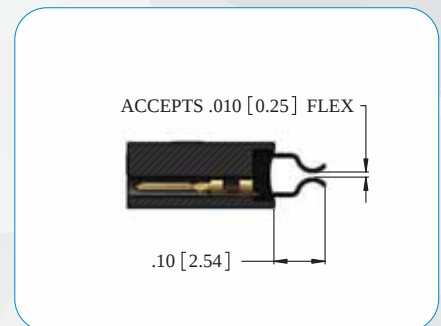
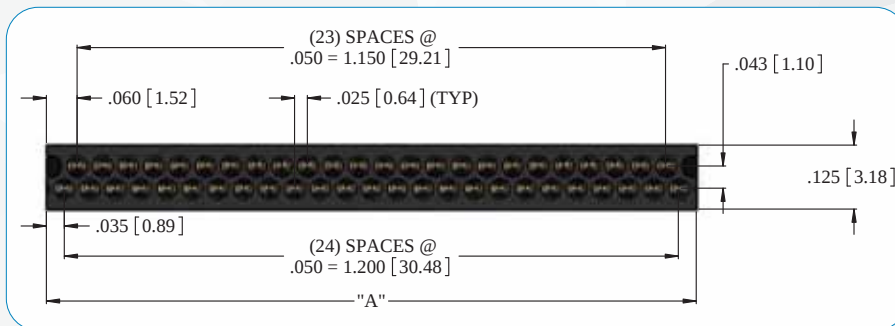
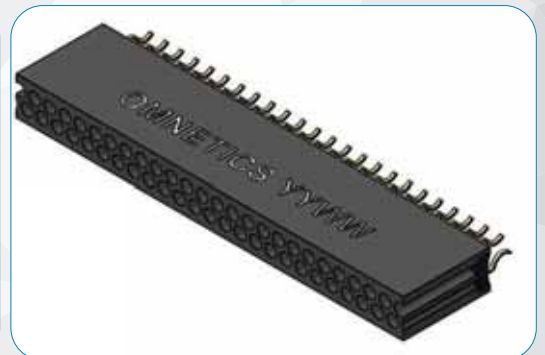
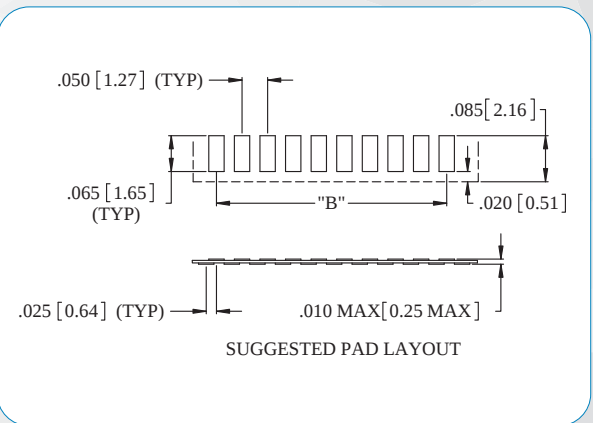
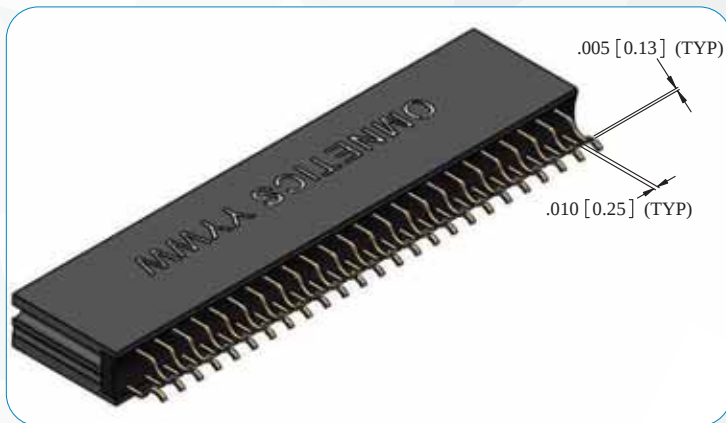
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-FF LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

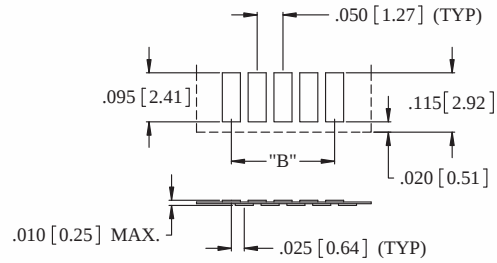
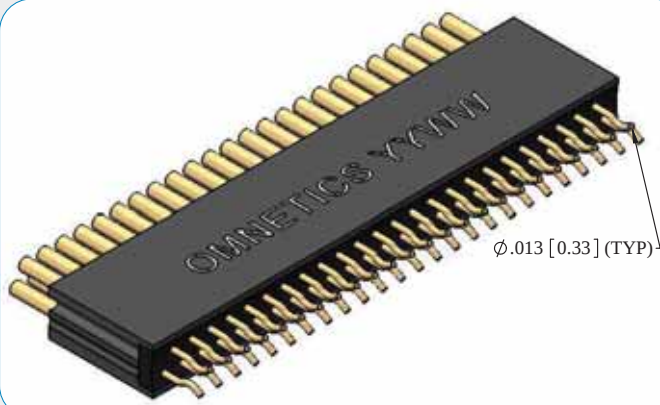
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

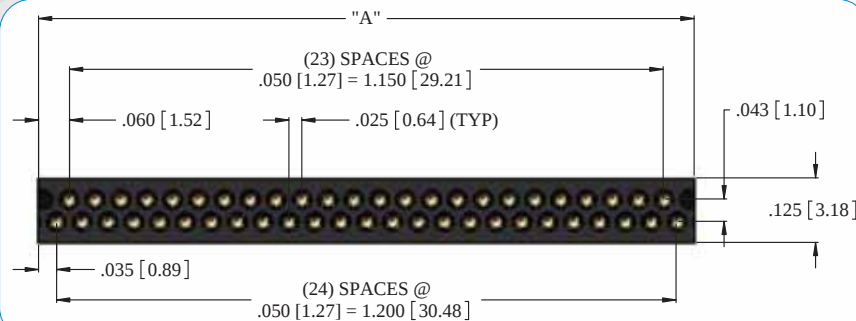
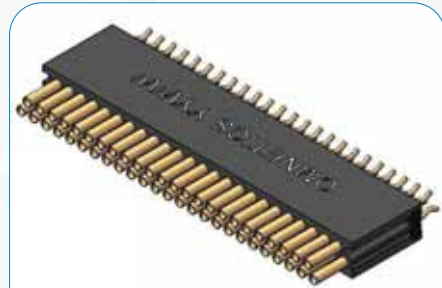
SSO-FF LAYOUT



SUGGESTED PAD LAYOUT



DATE CODE:
YY: YEAR
WW: WEEK



ACCEPTS .010 [0.26] FLEX



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

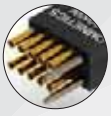
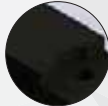
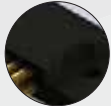
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

FLEX TAIL (TYPE FF) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PSM PIN CONNECTOR	02 - 97	FF	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			 
SSO SOCKET CONNECTOR			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
			 
			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			 
			M MOUNTING HOLE
			 
			HT HIGH TEMP
EXAMPLES:			RoHS RoHS COMPLIANT
			
PSM-47-FF	SSO-35-FF-M-GS		

Dual Row Offset Micro Strip

LONG/SHORT ALT. THRU HOLE (TYPE H2)

Dual Row Offset Micro Strip connectors have contacts arranged on .050" (1.27 mm) centerlines. The thru-hole tails are arranged in a .50" x .075" grid, allowing space for traces and annular rings. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These durable light weight connectors are designed to withstand the most demanding applications.

Available with mounting holes suitable for PCB and flex mounting. These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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ELECTRO-MECHANICAL SPECS

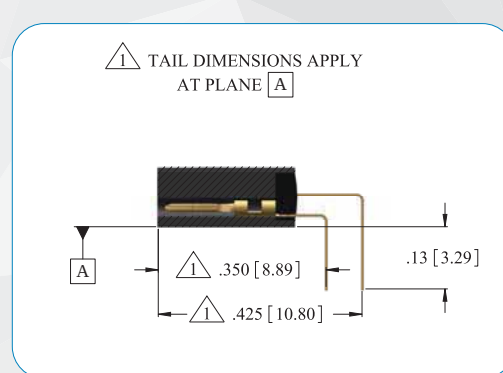
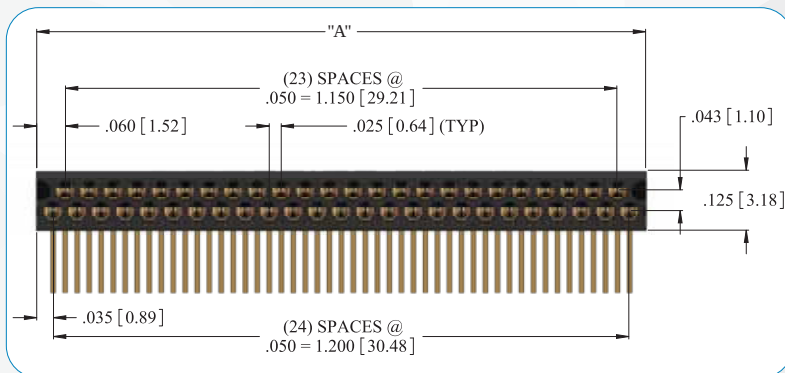
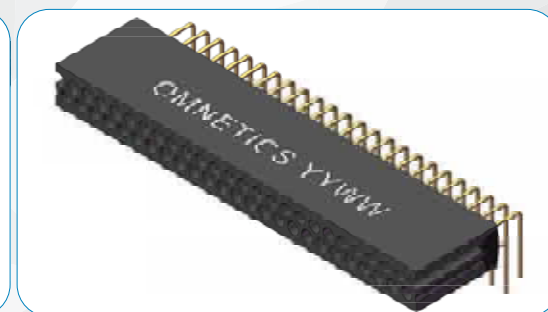
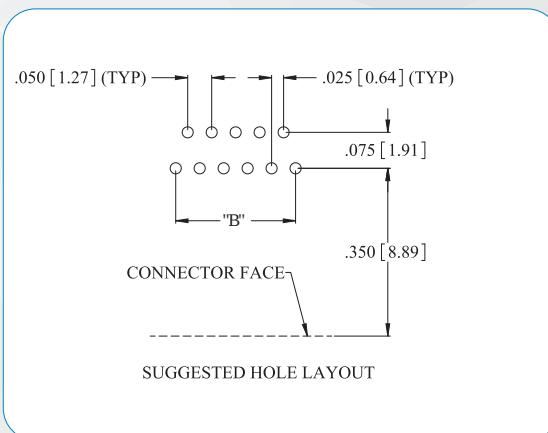
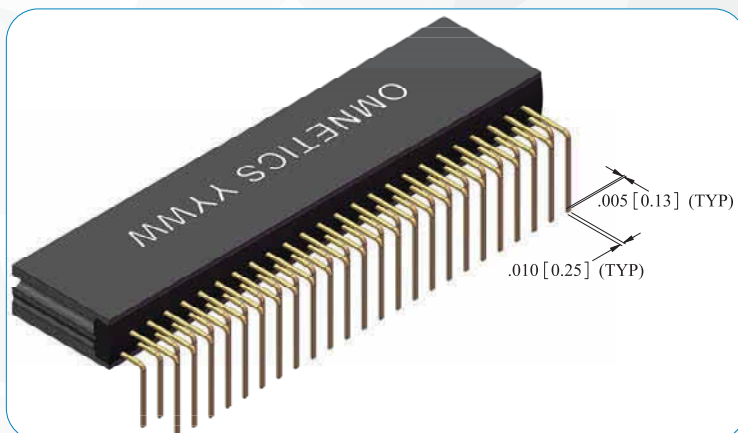
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

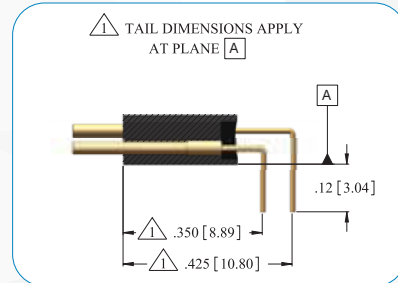
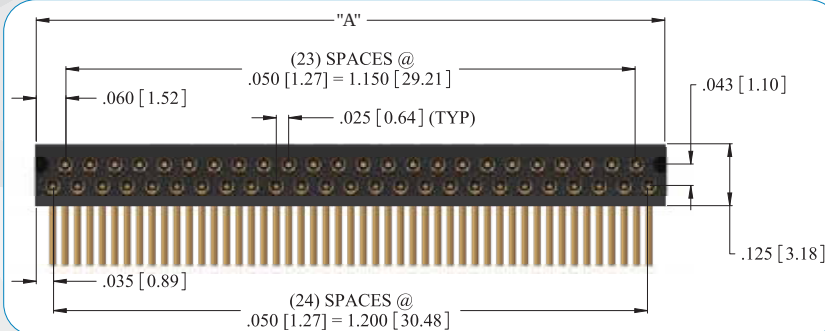
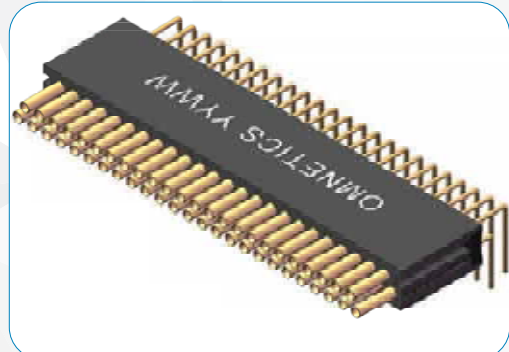
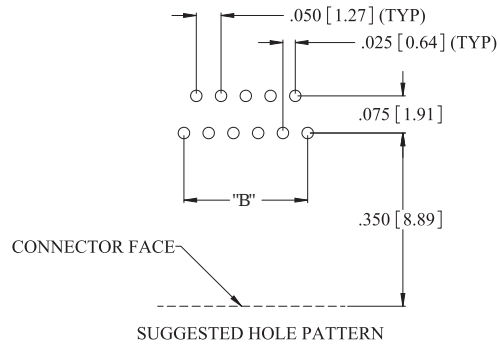
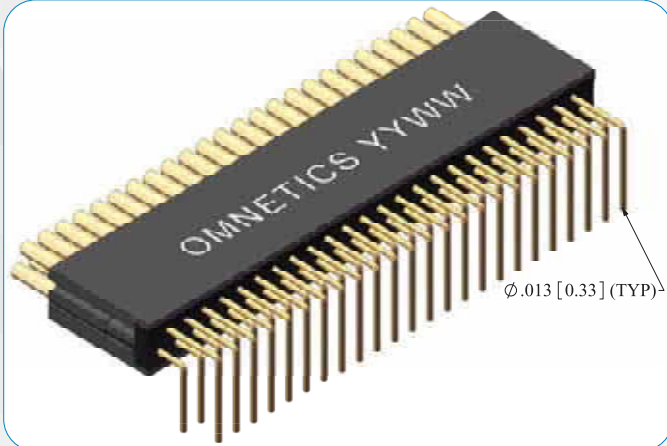
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SSO-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SHORT/LONG ALT. THRU HOLE TAIL (TYPE H2) ORDERING GUIDE

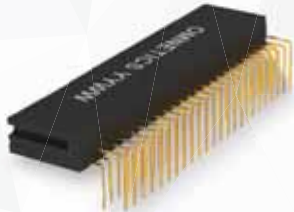
SERIES

OF CONTACTS

TERMINATION TYPE

COMMON OPTIONS

PSM
PIN CONNECTOR

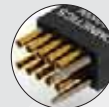


02 - 97

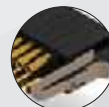
H2



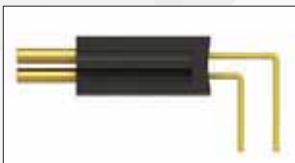
G GUIDE POST/HOLE
GS MULTIPLE GUIDE POSTS/
HOLES



LE LATCH (END MOUNT)
LES MULTIPLE LATCHES
(END MOUNT)



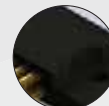
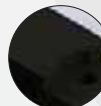
SSO
SOCKET CONNECTOR



LT LATCH (TOP MOUNT)
LTS MULTIPLE LATCHES (TOP
MOUNT)



M MOUNTING HOLE



HT HIGH TEMP

EXAMPLES:



PSM-45-H2



SSO-35-H2-M-GS

RoHS RoHS COMPLIANT



Dual Row Offset Micro Strip

SOLDER CUP (TYPE SS)

Solder Cup Tails are commonly used for hand soldering applications, and/or specific wire based devices that require a small robust connector during one of the final phases of production. These connectors feature Omnetics' gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. They are available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations and accept 26 AWG or smaller stranded wire.



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ELECTRO-MECHANICAL SPECS

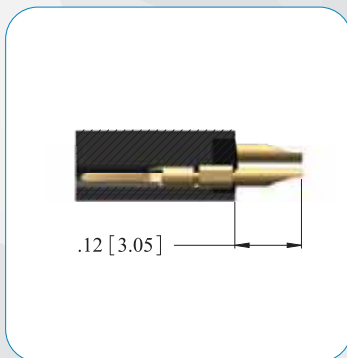
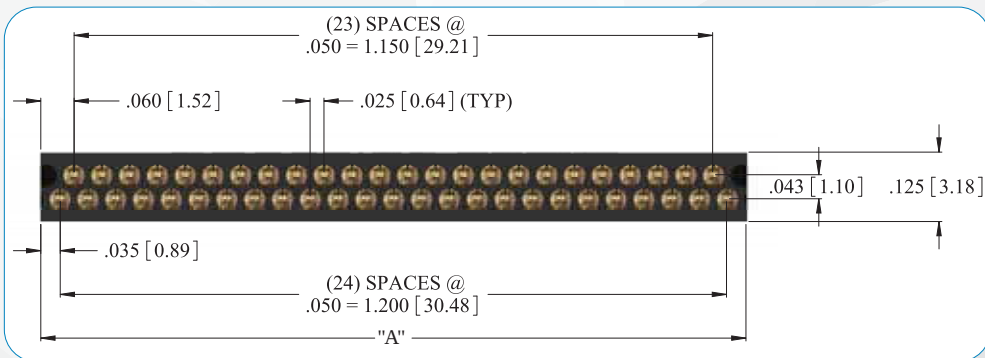
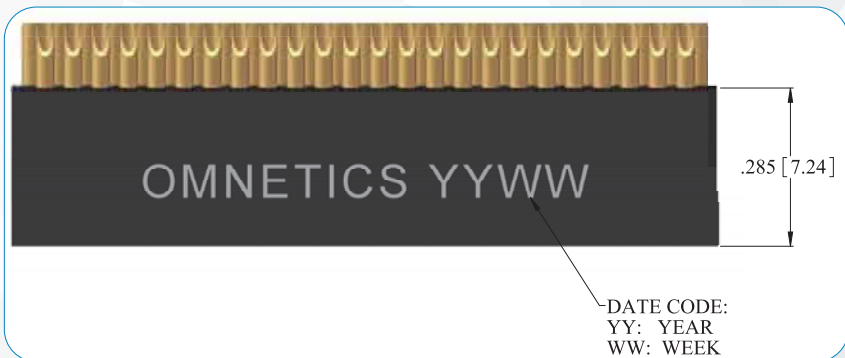
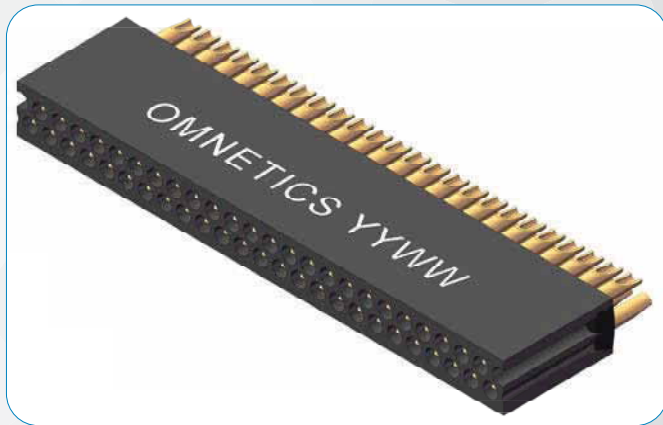
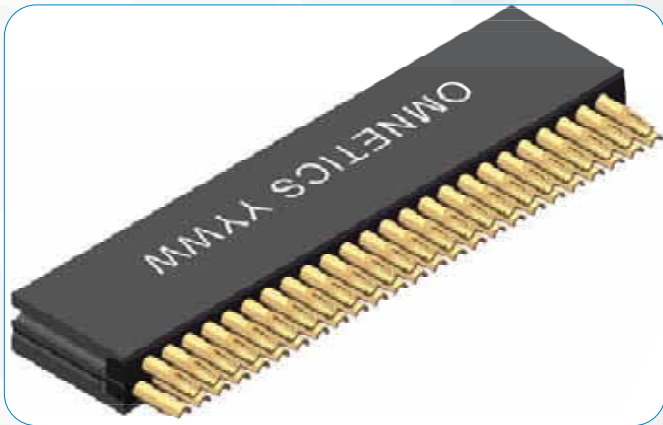
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket Soldercup Termination: Hard Gold Plated per ASTM B488
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Soldercup Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin Soldercup Termination: Hard gold plated per ASTM B488
- RoHS Socket Soldercup Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-SS LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each latch

Add 1 contact cavity for each guide post hole

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .025"

Add .150" for each mounting hole

Add fixed end length constant

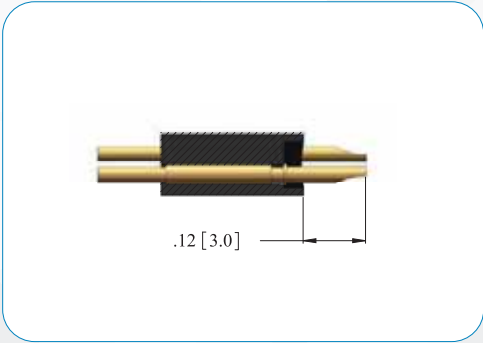
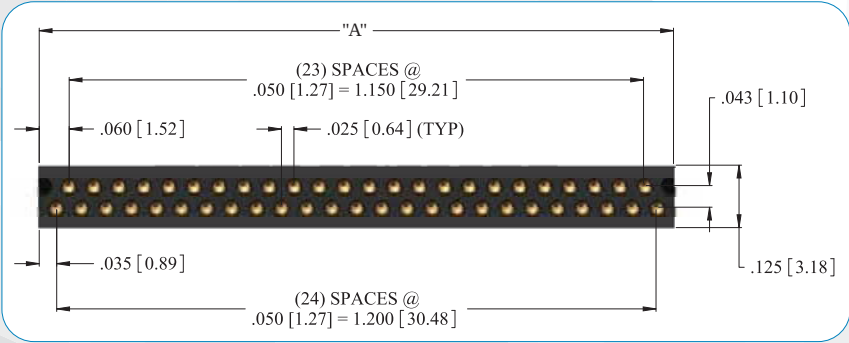
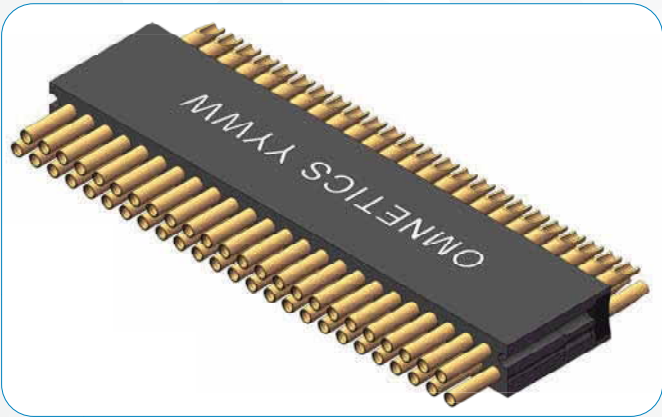
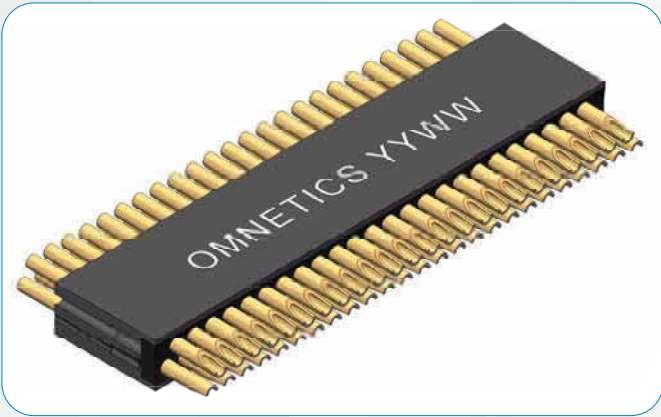
Total Length (Dimension A):

0.070"*

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. * Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SSO-SS LAYOUT



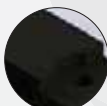
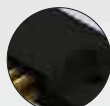
DIMENSIONS FOR "A"

To determine connector length "A":	
Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post hole	
Total contact cavities	
Subtract 1 from the total to get the number of cavity spaces and multiply by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	0.070"*
Total Length (Dimension A):	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. * Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SOLDER CUP (TYPE SS) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PSM PIN CONNECTOR	02 - 97	SS	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			 
SSO SOCKET CONNECTOR			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
			 
			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			 
			M MOUNTING HOLE
			 
EXAMPLES:			HT HIGH TEMP
			RoHS RoHS COMPLIANT
PSM-50-SS-RoHS			
	SSO-50-SS		

Dual Row Offset Micro Strip

VERTICAL SMT (TYPE VV)

Vertical SMT Micro Strip connectors require a minimal amount of board space on flex circuits and rigid circuit boards. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system which meets the performance specifications of MIL-DTL-83513. These rugged light weight connectors are suitable for the most demanding applications. Available with mounting holes and suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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ELECTRO-MECHANICAL SPECS

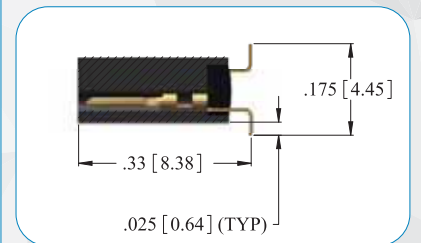
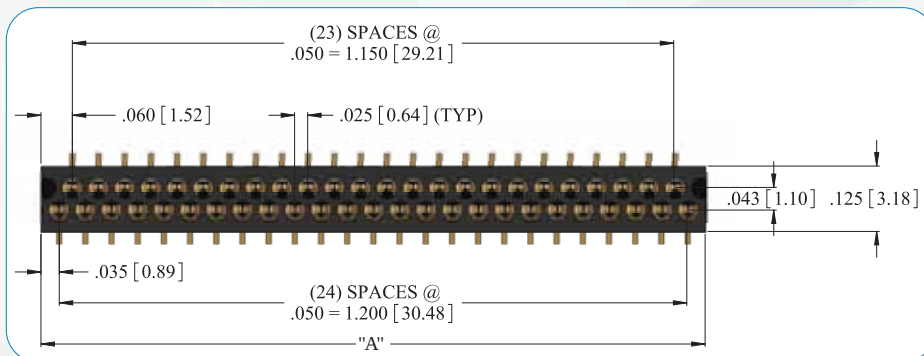
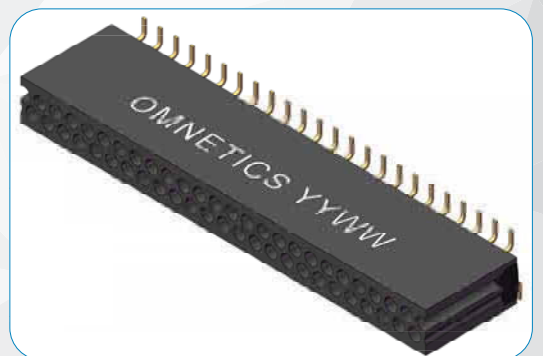
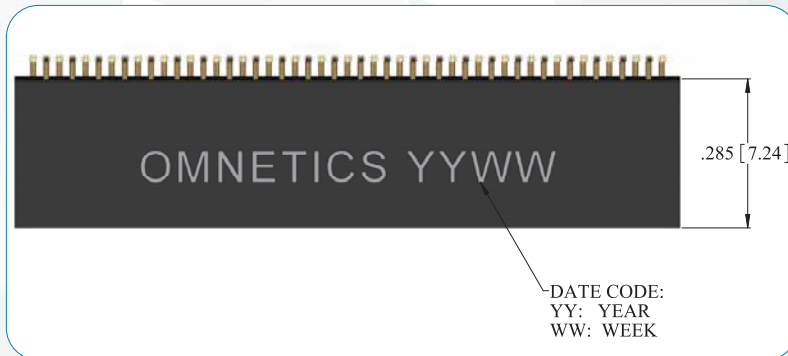
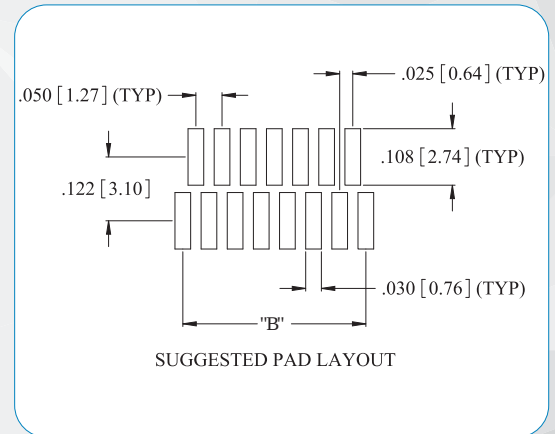
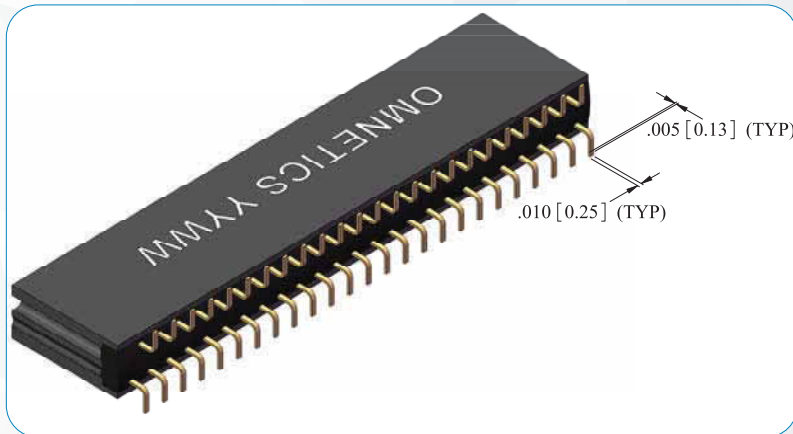
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

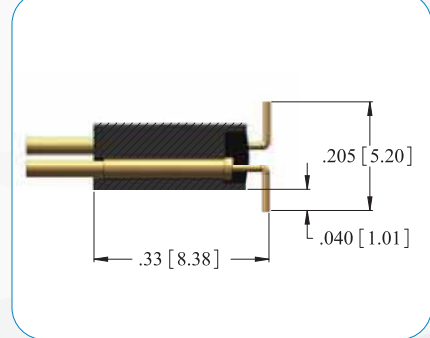
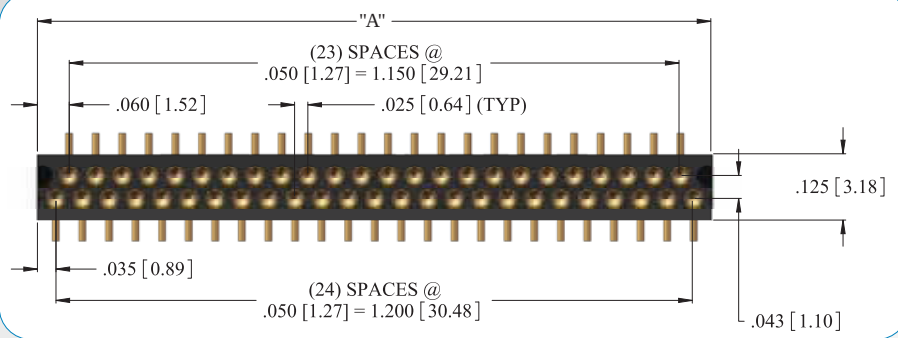
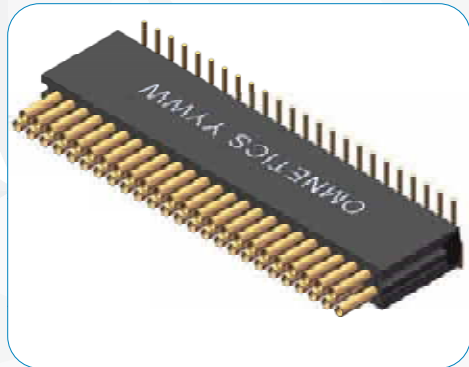
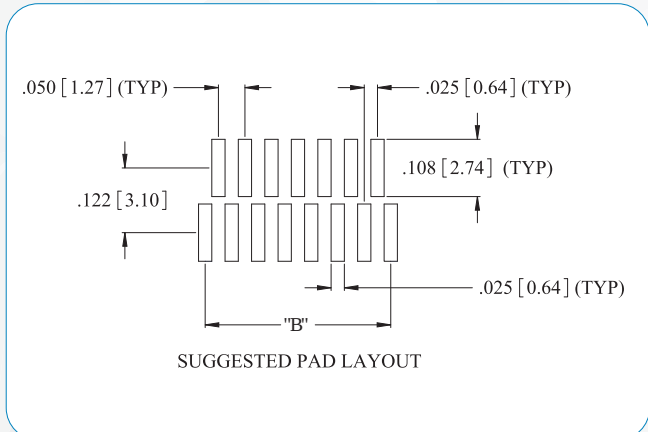
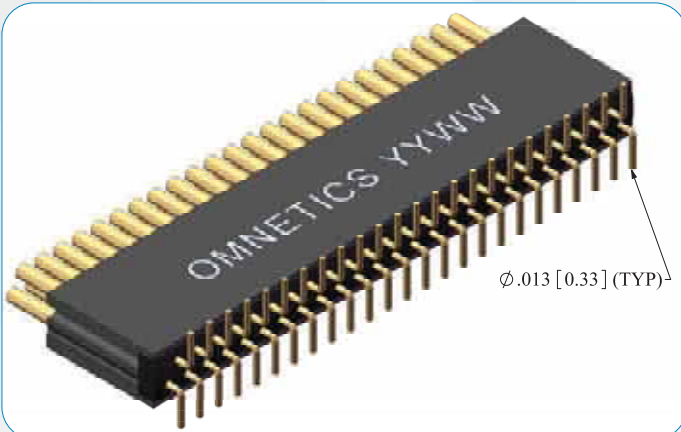
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SSO-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	.070"
Total Length (Dimension A)	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes.

* Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

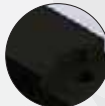
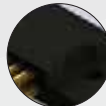
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each latch	
Add .025" for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pad layout length 2.40" (60.96). Add .100" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole or latch, .100" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

VERTICAL SMT (TYPE VV) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PSM PIN CONNECTOR	02 - 97	VV	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			 
SSO SOCKET CONNECTOR			LE LATCH (END MOUNT) LES MULTIPLE LATCHES (END MOUNT)
			 
			LT LATCH (TOP MOUNT) LTS MULTIPLE LATCHES (TOP MOUNT)
			 
			M MOUNTING HOLE
			 
EXAMPLES:			HT HIGH TEMP
			RoHS RoHS COMPLIANT
PSM-49-VV-GS		SSO-35-VV-M-GS	

Dual Row Offset Micro Strip

PRE-WIRED/CABLE (TYPE WD/WC)

Pre-wired offset Dual Row Micro Strip connectors are available with 26 AWG to 32 AWG stranded wire. These assemblies are crimped using proprietary semi-automated crimping systems. Due to the small size and precision required to make these quality crimps, hand crimping is not an option. Pre-crimped wires and contacts are potted in place, further protecting the integrity of the crimp joint. Building these parts to order allows for maximum flexibility in wire type, size and color coding. Commercial Off The Shelf (COTS) versions are also available with 18" of color coded 26 AWG Teflon for quick turn around.

These connectors are available in standard sizes ranging from 2 through 97 positions as well as custom configurations.



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ELECTRO-MECHANICAL SPECS

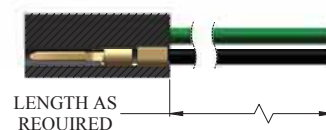
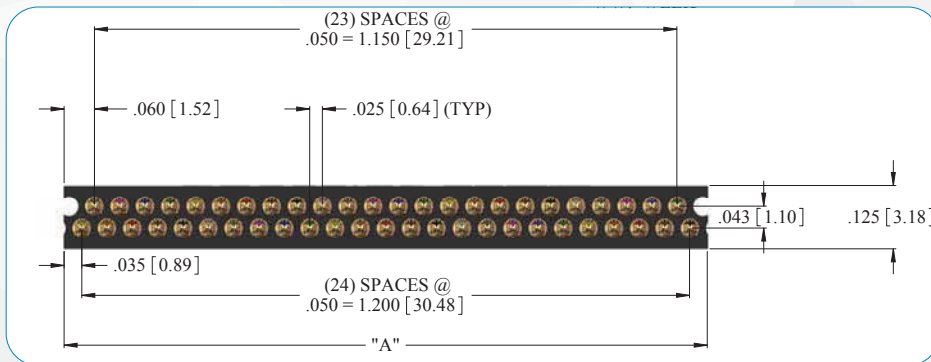
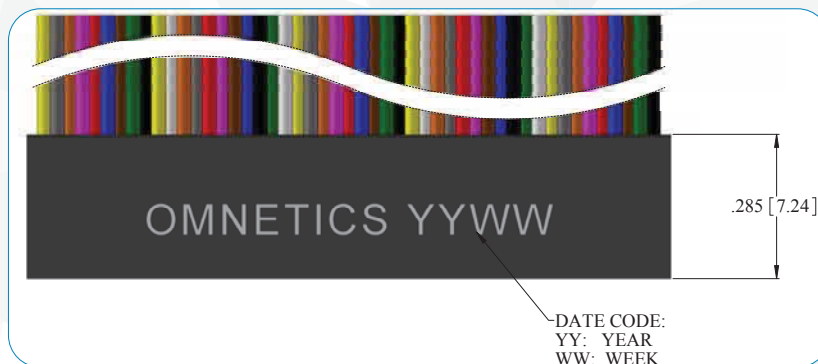
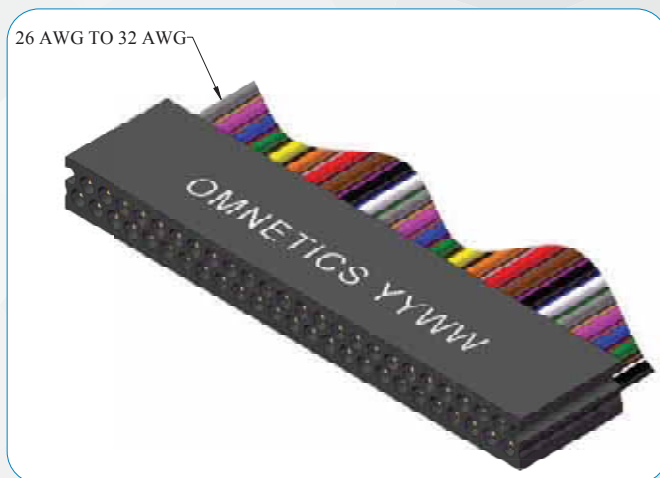
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 3 AMPs max per contact
- Voltage Rating (DWV): 600 VAC RMS Sea Level
- Insulation Resistance: 5000 Megohms min @ 500 VDC
- Shock: 50 g's discontinuity < 1 microsecond
- Vibration: 20 g's discontinuity < 1 microsecond
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 26 Milliohms (65 mV max @ 2.5 amp)
- Mating/Unmating Force: 3 oz (85 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Wire: 26 AWG, Teflon Insulated per NEMA-HP3
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Offset Micro Strip

PSM-WD/WC LAYOUT



DIMENSIONS FOR "A"

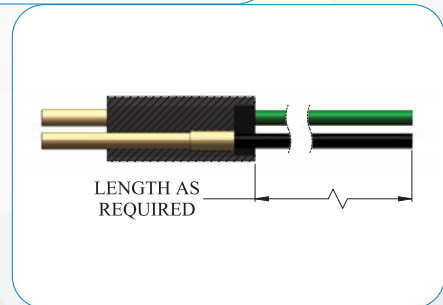
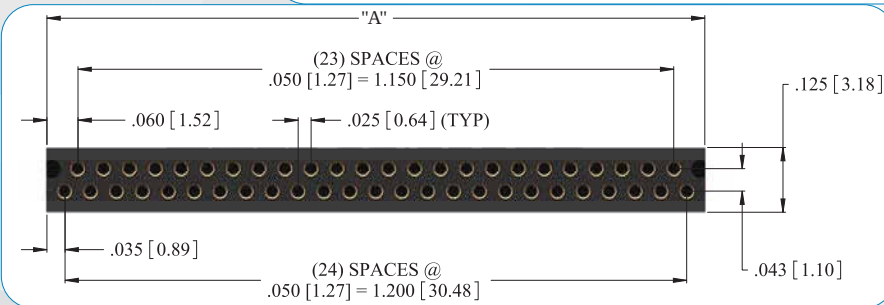
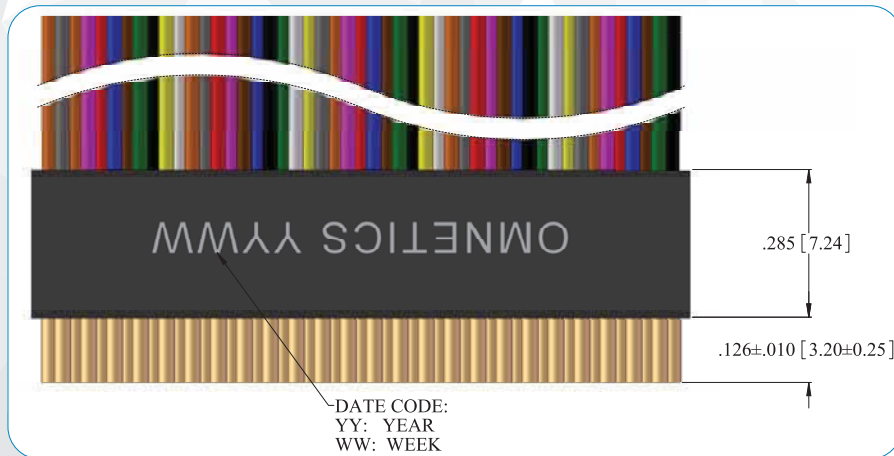
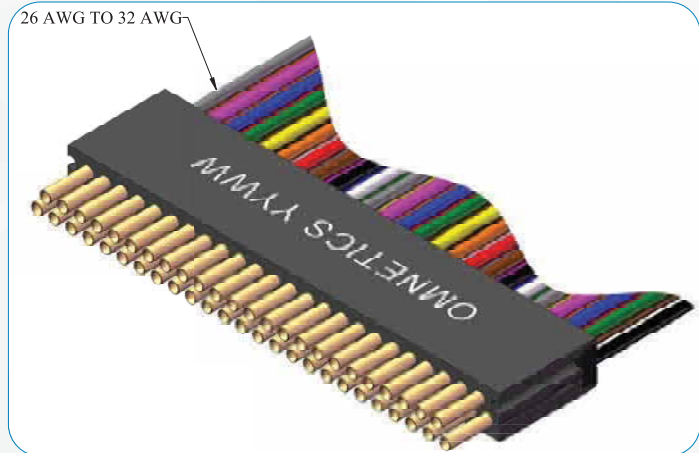
To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each latch	
Add 1 contact cavity for each guide post hole	
Total contact cavities	
Subtract 1 from the total to get the number of cavity spaces and multiply by .025"	
Add .150" for each mounting hole	
Add fixed end length constant	0.070"
Total Length (Dimension A):	

Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. * Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Offset Micro Strip

SSO-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each latch

Add 1 contact cavity for each guide post hole

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .025"

Add .150" for each mounting hole

Add fixed end length constant

0.070"

Total Length (Dimension A):

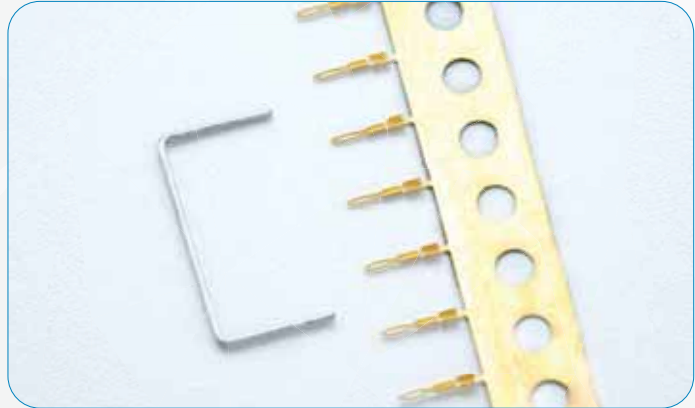
Notes: Maximum length 2.47" (62.74) without mounting holes. Maximum length 2.77" (70.36) with two end mounting holes. Maximum number of contact cavities is 97. Number of contacts must be reduced to accommodate hardware and mounting holes. * Add 0.095" when an even number of contact cavities is used and the connector has mounting holes. Default locations for guide post holes and latches may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Flex Pin - Nano

THE FLEX PIN DESIGN

Designed Simply for High Shock & Vibration

Omnetics' Flex Pin contact design was designed and produced many years before the creation of MIL-DTL-32139. This simple one piece design is stamped from ASTM B194 BeCu. The spring characteristic of BeCu is ideal for withstanding high shock and vibration.



The Flex Pin contact is intermateable with all MIL- DTL-32139 sockets. Its rugged design easily passes the shock and vibration requirements of the military specification. In fact, independent tests have proven that the Flex Pin contact can even withstand the intense shock and vibration of the geophysical drilling market.

Flex Pin contacts are all plated with 50 micro inches (1.27 μm) of gold over 50 micro inches (1.27 μm) of nickel. All pins are plated post forming to ensure a non-porous surface.

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FLEX PIN

The Omnetics Nano Flex Pin has been in successful production for 50 years, while its young counterpart the Nano twist pin is relatively new. Nano twist pin manufacturers took an old standard and shrunk it down to Nano size. Omnetics, on the other hand, looked at the old technology and found ways to improve and simplify the design. Omnetics removed the extra crimps and welds and came up with an elegant one piece design with the same performance as the overly complex twist pin. The elimination of extra joints removed resistance points as well as spots for potential fatigue and failure.

Nano Flex Pins are rated at 1 AMP each and are the foundation of our Nano-D/Bi-Lobe® & MIL-DTL-32139 series of connectors.



NANO FLEX PIN

Single Row Nano Strip

HORIZONTAL SMT (TYPE AA)

Single Row Horizontal Nano Strip connectors offer an extremely low profile package that is well suited for pick and place methods. They have a very tight pitch of .025" (64 mm) centerlines. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications.

These connectors are available in standard sizes ranging from 2 to 60 positions, as well as custom configurations.



ELECTRO-MECHANICAL SPECS

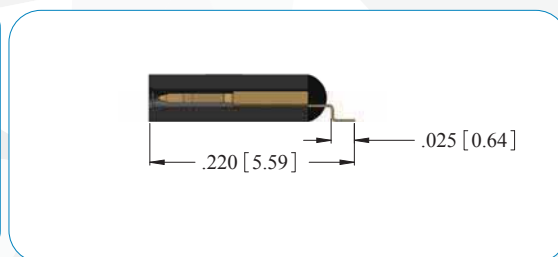
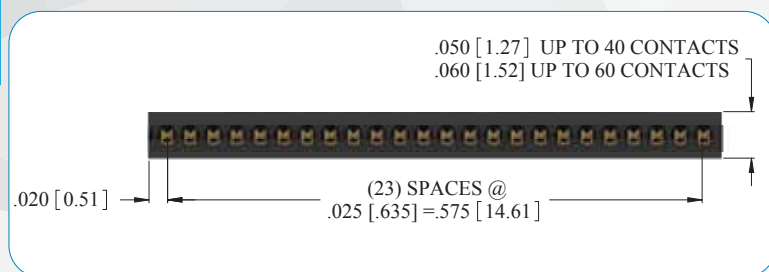
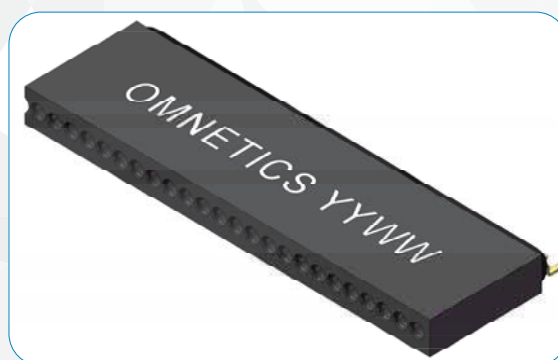
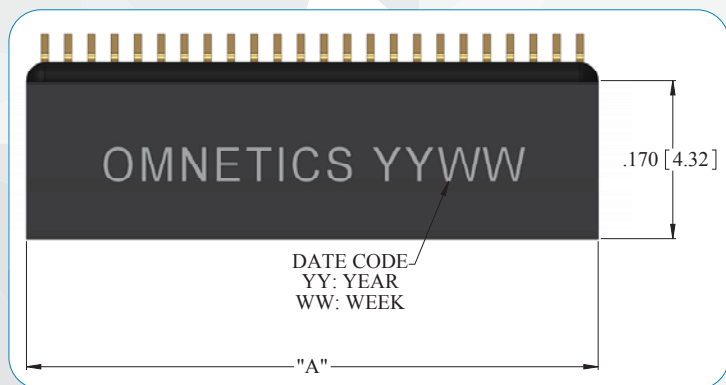
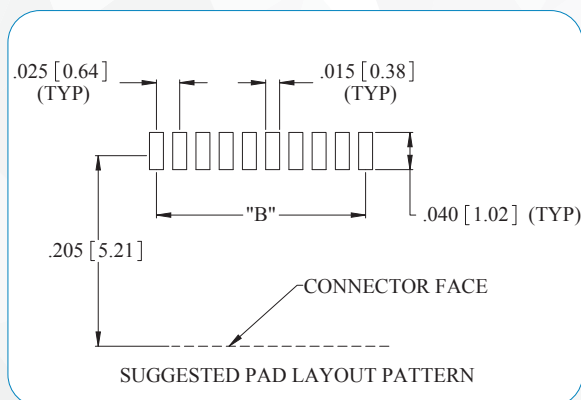
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Nano Strip

NPS-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

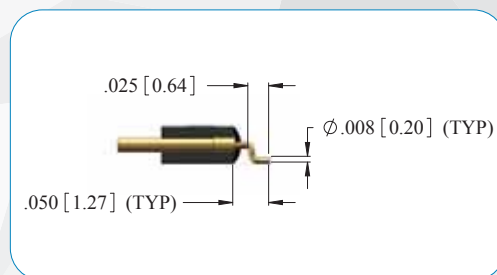
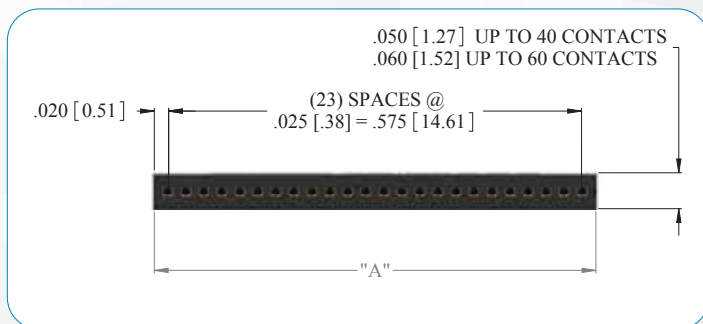
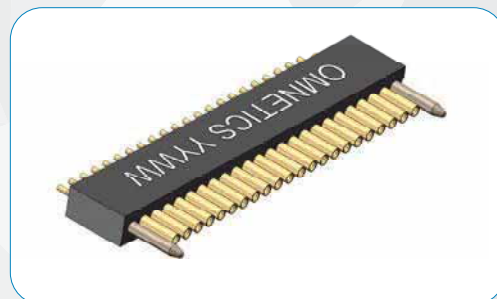
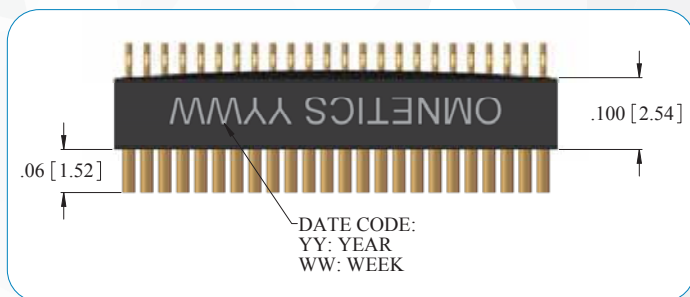
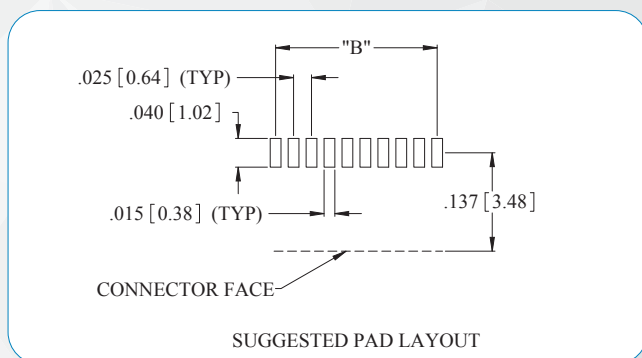
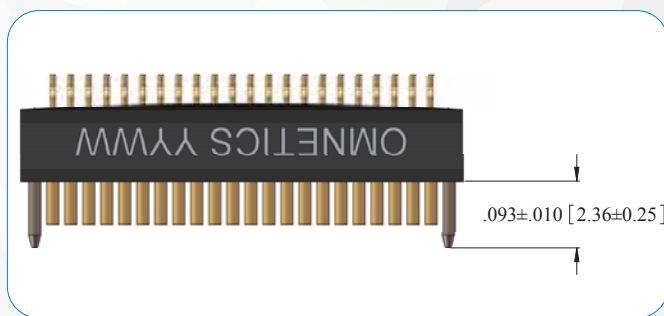
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Add .075" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46). Add .050" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole, .050" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

NSS-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46).

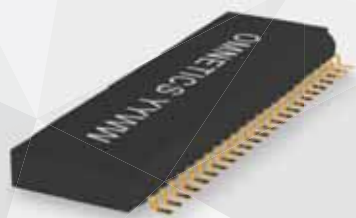
Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPS PIN CONNECTOR 	02 - 60 02 THRU 40 (.050" THICK BODY) 41 THRU 60 (.060" THICK BODY)	AA  	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES   M MOUNTING HOLE  HT HIGH TEMP RoHS RoHS COMPLIANT 

EXAMPLES:



NPS-18-AA



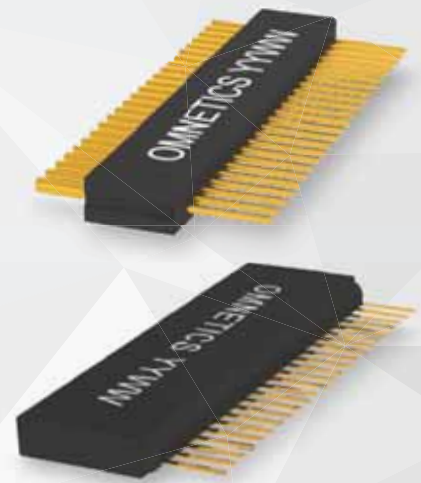
NSS-22-AA

Single Row Nano Strip

STRAIGHT TAIL (TYPE DD)

Single Row Nano Strip connectors can be loaded with simple straight tails (Integral or Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits, they are designed on .025" (.64 mm) centerlines. The straight solid tails are also commonly used in ultra fine wire wrap terminations, such as electrophysiology. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-32139. These connectors are available in standard sizes ranging from 2 through 60 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



ELECTRO-MECHANICAL SPECS

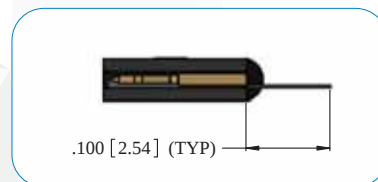
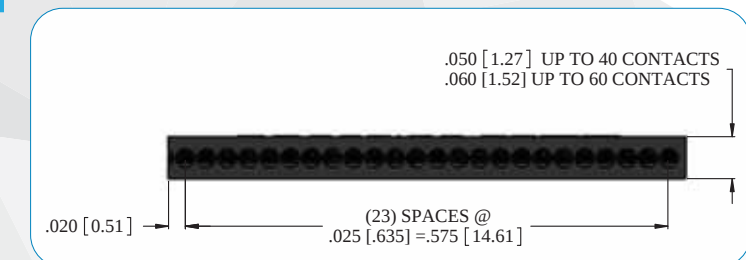
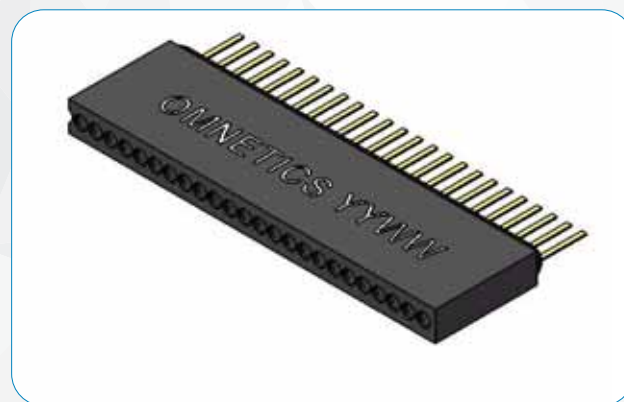
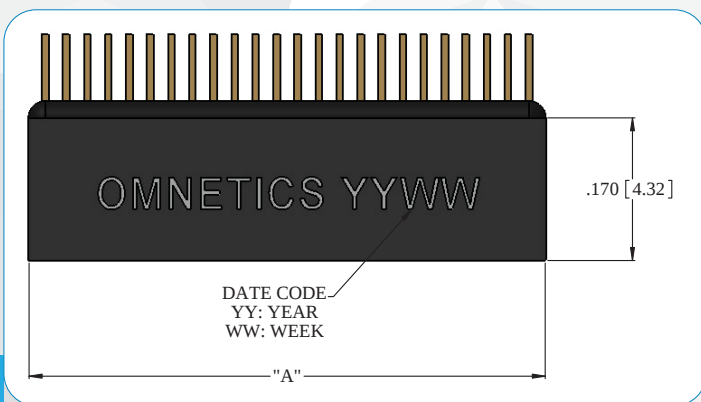
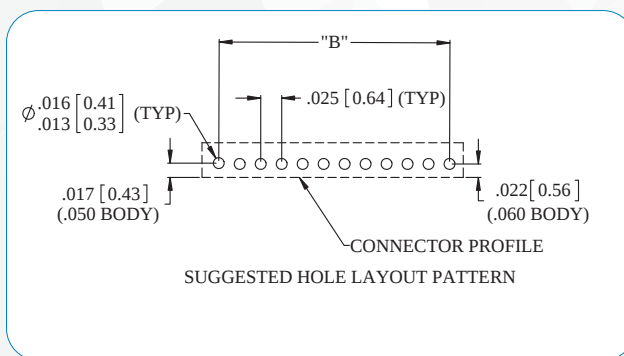
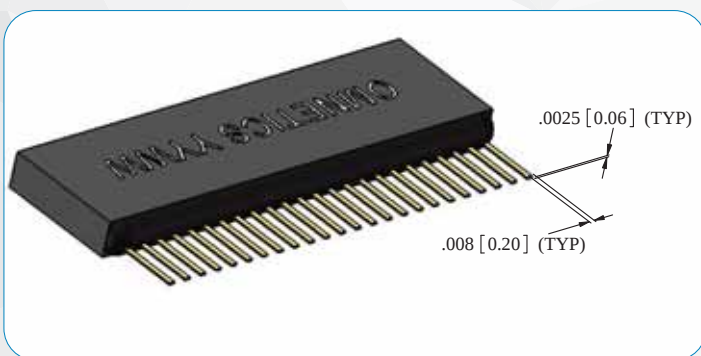
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Nano Strip

NPS-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

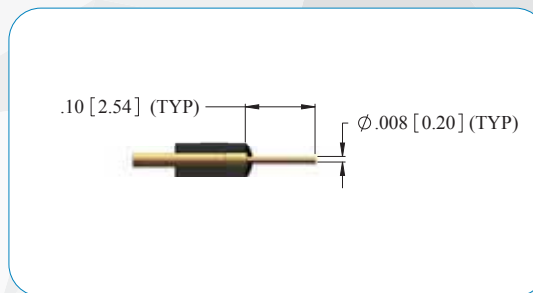
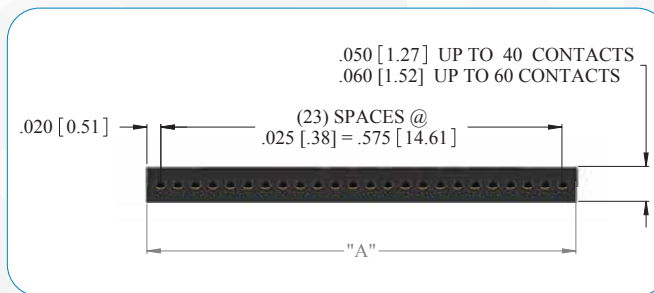
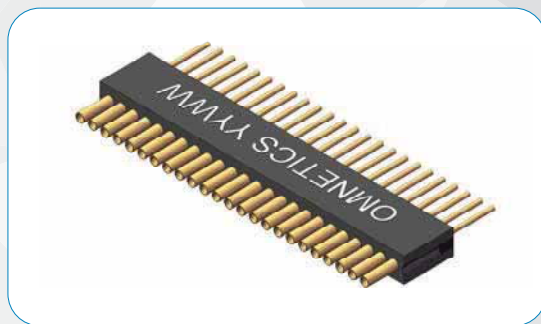
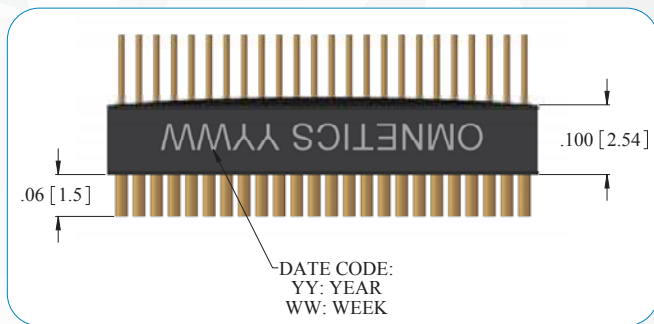
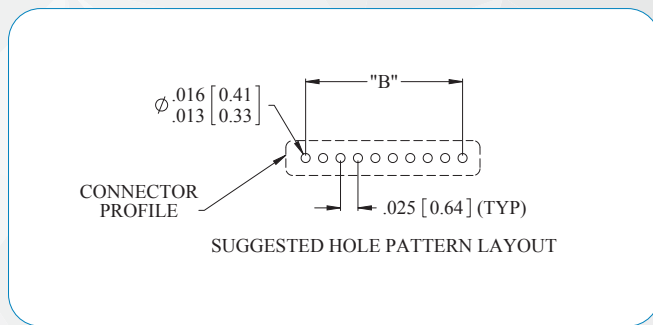
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Add .075" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46). Add .050" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole, .050" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

NSS-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

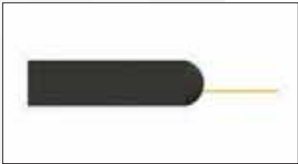
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46).

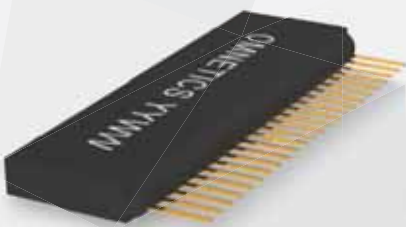
Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

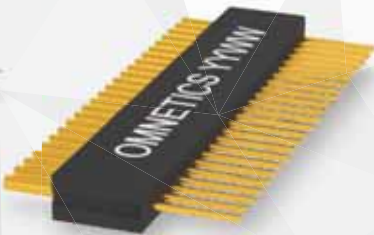
STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPS PIN CONNECTOR	02 - 60	DD	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/ HOLES
	02 THRU 40 (.050" THICK BODY)		 
NSS SOCKET CONNECTOR	41 THRU 60 (.060" THICK BODY)		M MOUNTING HOLE  HT HIGH TEMP
			RoHS RoHS COMPLIANT 

EXAMPLES:



NPS-22-DD-G



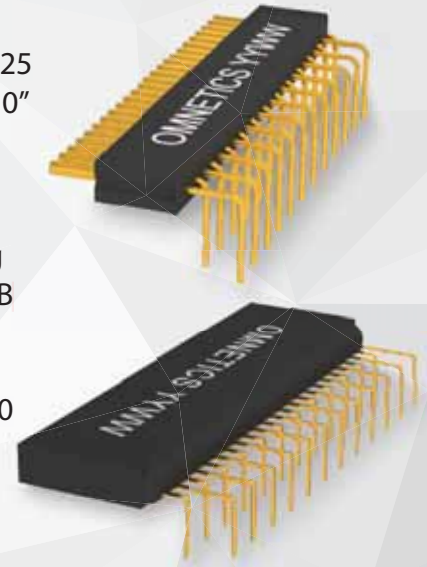
NSS-22-DD-RoHS

Single Row Nano Strip

LONG/SHORT ALT. THRU-HOLE (TYPE H2)

The Single Row Nano Strip connectors have contacts arranged on .025 (.64 mm) centerlines. The thru-hole tails are arranged in a .050" x .050" grid, allowing space for traces and annular rings. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications. They are available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 to 60 positions, as well as custom configurations.



ELECTRO-MECHANICAL SPECS

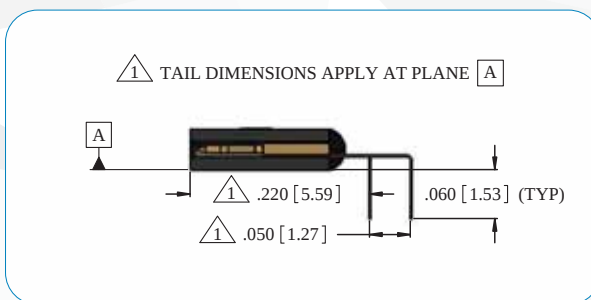
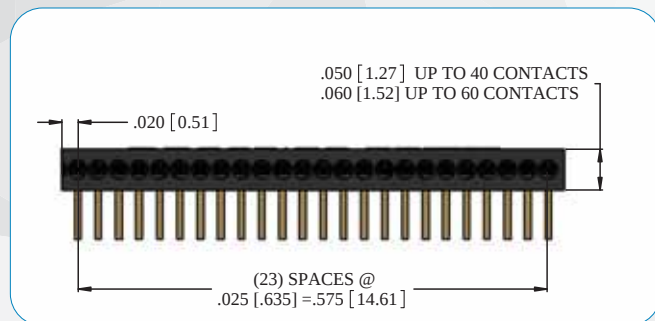
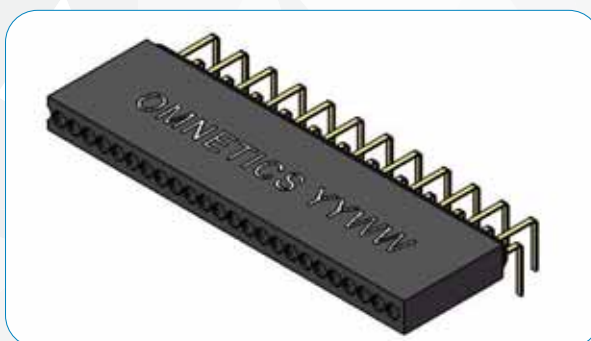
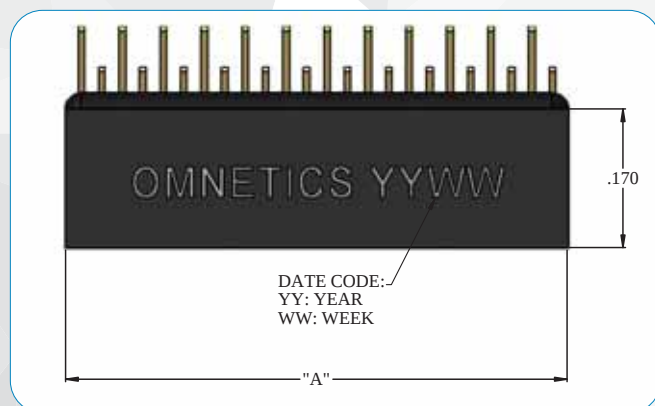
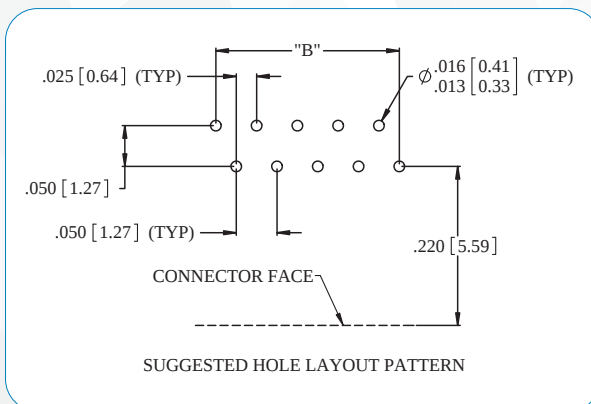
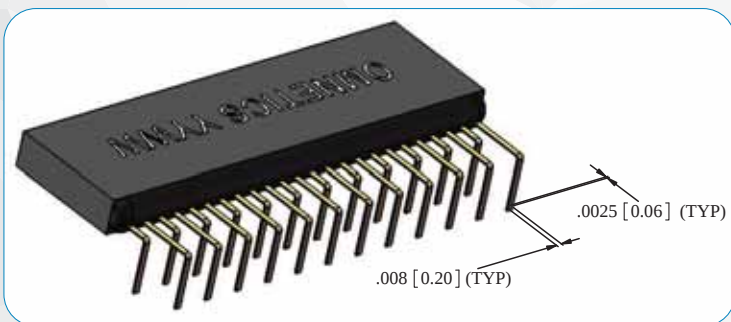
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Nano Strip

NPS-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

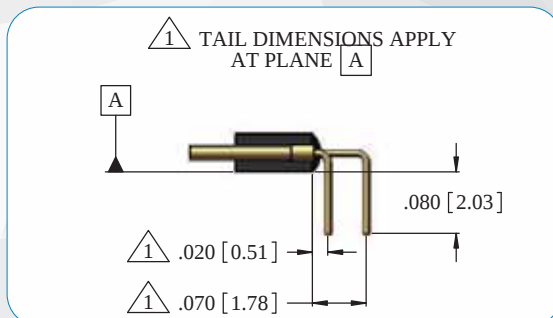
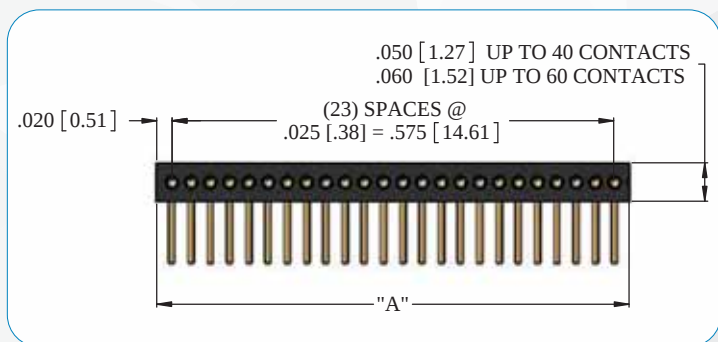
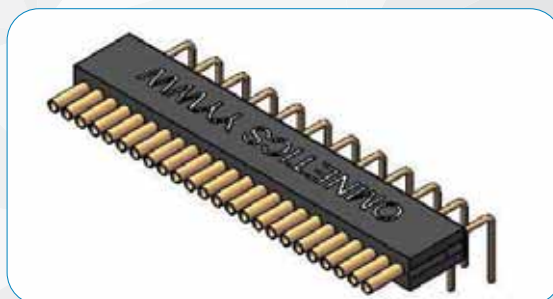
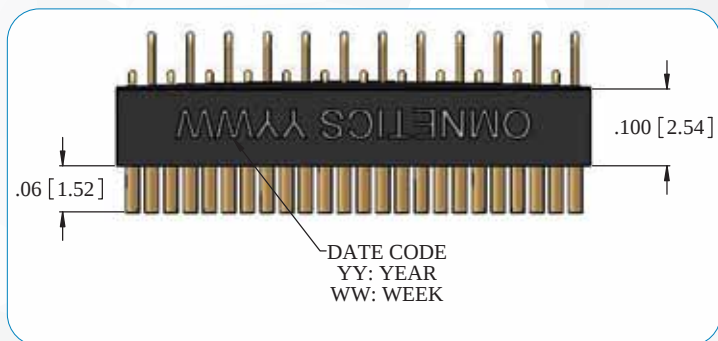
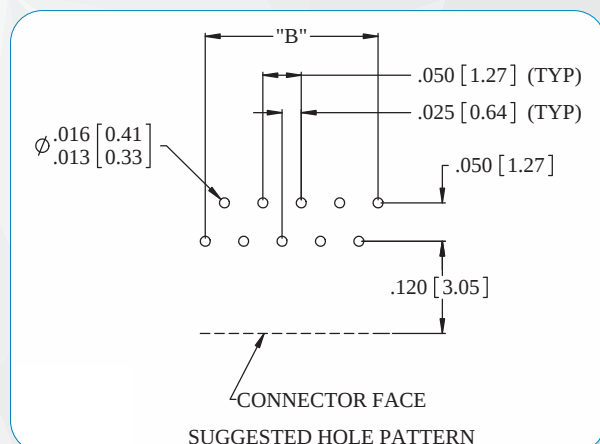
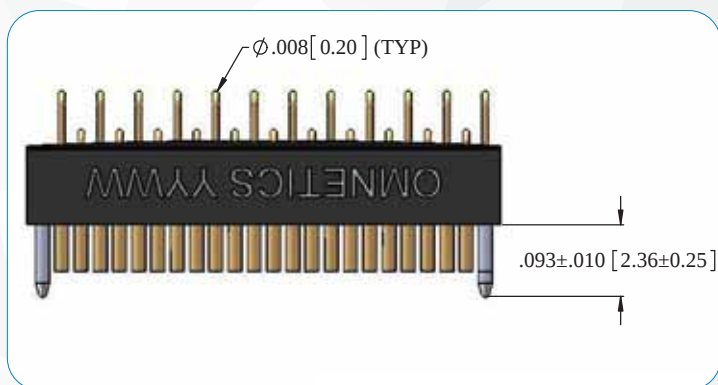
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Add .075" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46). Add .050" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole, .050" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

NSS-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

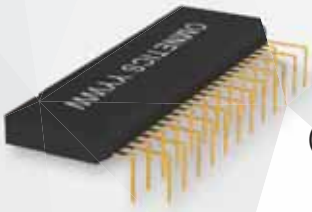
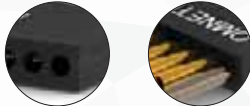
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46).

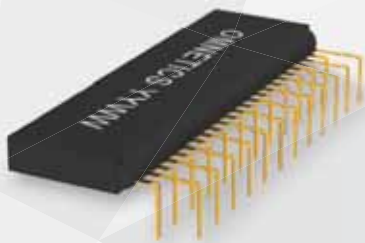
Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

SHORT/LONG ALT. THRU HOLE TAIL (TYPE H2) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPS PIN CONNECTOR 	02 - 60 02 THRU 40 (.050" THICK BODY) 41 THRU 60 (.060" THICK BODY)	H2 	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES  M MOUNTING HOLE  HT HIGH TEMP RoHS RoHS COMPLIANT 
NSS SOCKET CONNECTOR 			

EXAMPLES:



NPS-18-H2



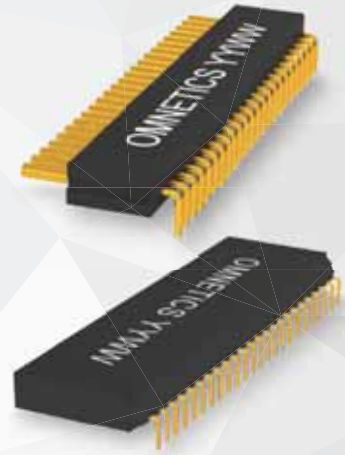
NSS-24-H2-RoHS

Single Row Nano Strip

VERTICAL SMT (TYPE VV)

The Single Row VV Nano Strip connectors have contacts arranged on .025 (.64 mm) centerlines. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications.

These connectors are available in standard sizes ranging from 2 to 60 positions, as well as custom configurations.



ELECTRO-MECHANICAL SPECS

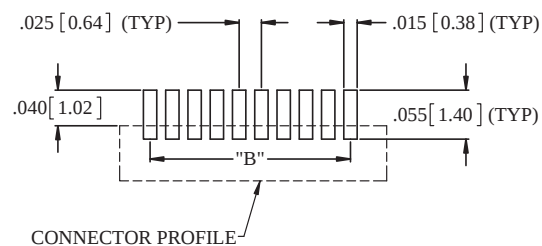
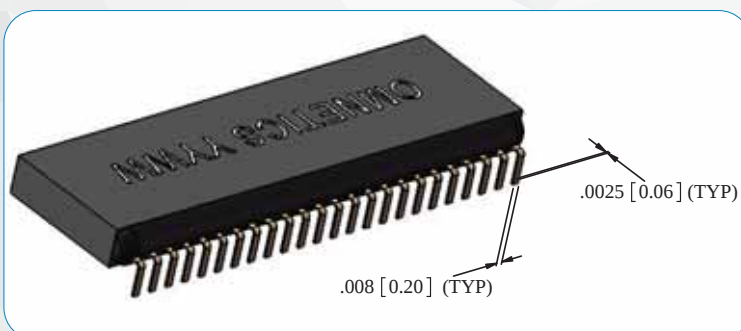
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

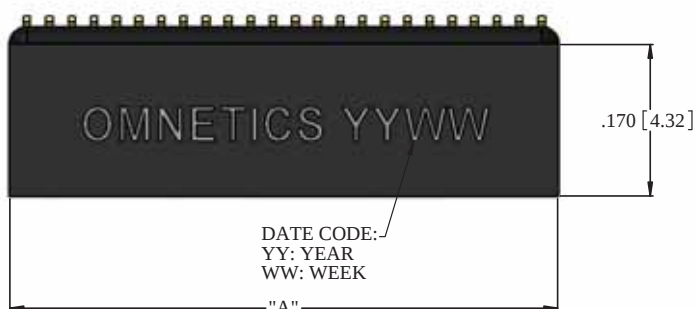
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Single Row Nano Strip

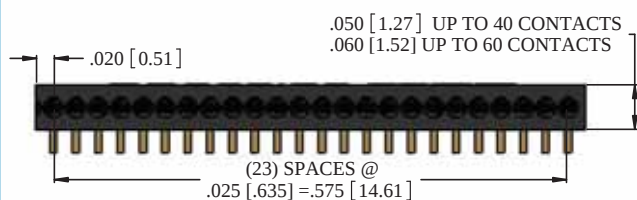
NPS-VV LAYOUT



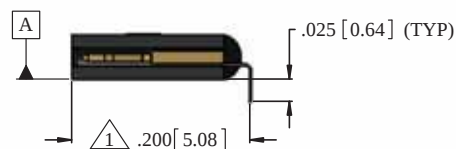
SUGGESTED PAD LAYOUT



DATE CODE:
YY: YEAR
WW: WEEK



1 TAIL DIMENSIONS APPLY AT PLANE A



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

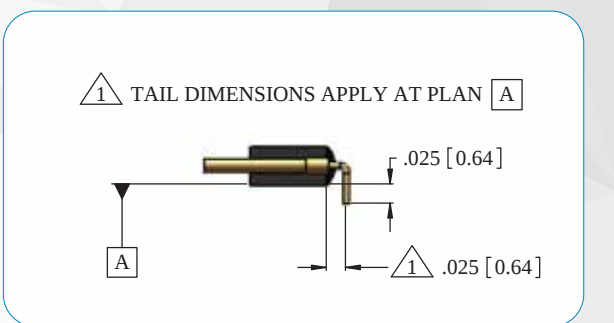
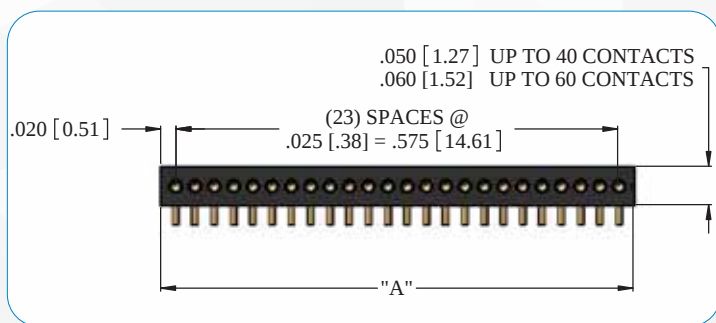
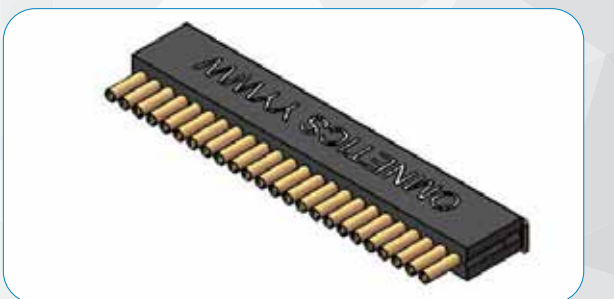
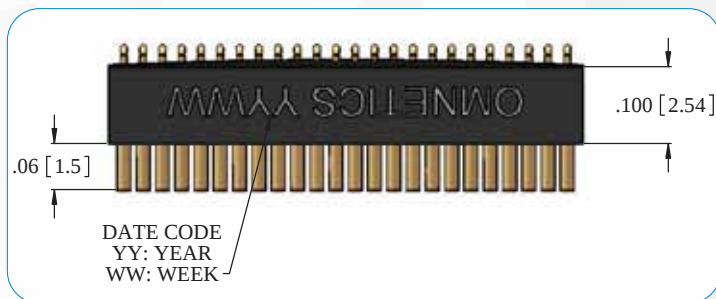
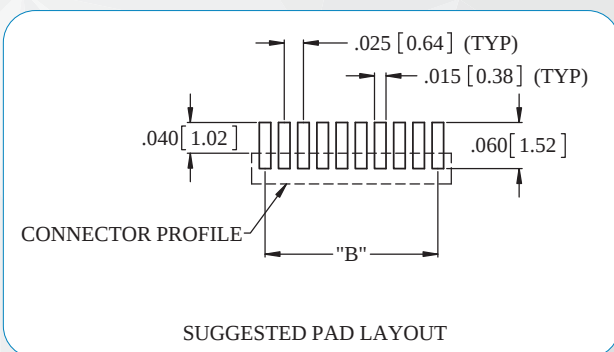
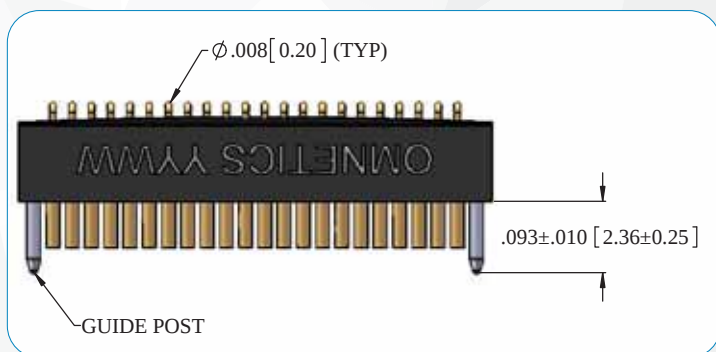
Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Add .075" (3 contact cavities) for each mounting hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46). Add .050" from center of mounting hole to first pad (if the first contact cavity is used for a guide post hole, .050" dimension must be adjusted).

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

NSS-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts	
Add 1 contact cavity for each guide post hole	
Add 3 contact cavities for each mounting hole	
Total contact cavities	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contact cavities minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" (1 contact cavity) for each guide post hole	
Total Length (Dimension B)	

Notes: Maximum pattern length @ .050" thick is .975" (24.76). Maximum pattern length @ .060" thick is 1.475" (37.46).

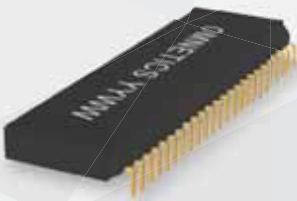
Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

VERTICAL SURFACE MOUNT TAIL (TYPE VV) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPS PIN CONNECTOR	02 - 60 02 THRU 40 (.050" THICK BODY) 41 THRU 60 (.060" THICK BODY)	VV 	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/ HOLES   M MOUNTING HOLE  HT HIGH TEMP RoHS RoHS COMPLIANT 
NSS SOCKET CONNECTOR			

EXAMPLES:



NPS-22-VV-GS



NSS-23-VV

Single Row Nano Strip

PRE-WIRED/CABLE (TYPE WD/WC)

Pre-wired Single Row Nano Strip connectors are available with 30 AWG or smaller stranded wire. These assemblies are crimped using proprietary semi-automated crimping systems. Due to their small size and precision required to make these quality crimps, hand crimping is not an option. Precrimped wires and contacts are potted in place further protecting the integrity of the crimp joint. Building these parts to order allows for maximum flexibility in wire type, size and color coding. Commercial Off The Shelf (COTS) versions are also available with 18" of color coded 30 AWG Teflon® wire for quick turn around.



These connectors are available in standard sizes ranging from 2 through 60 positions as well as custom configurations.

ELECTRO-MECHANICAL SPECS

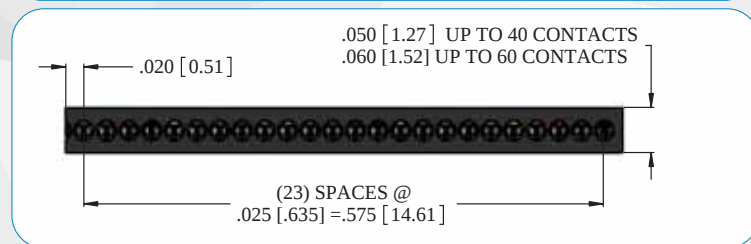
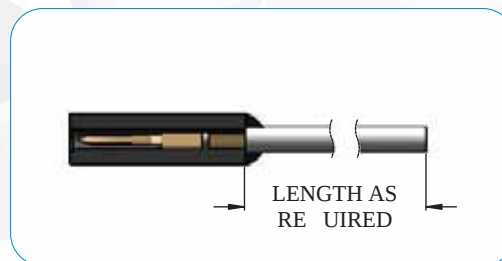
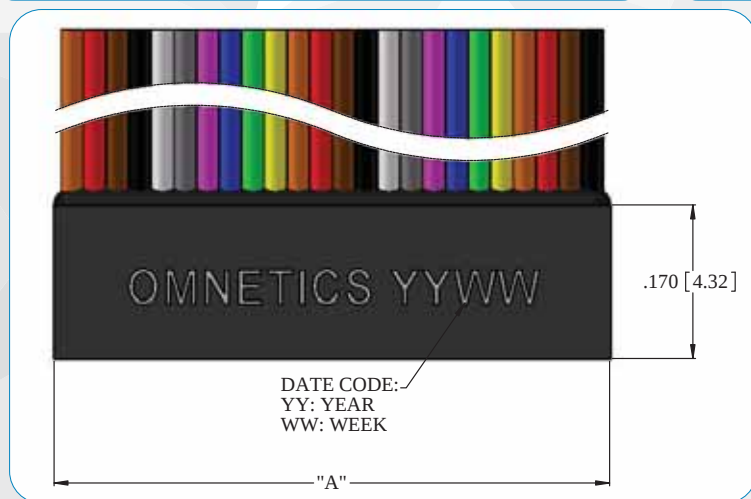
• Durability:	2000 Cycles
• Temperature:	-55°C to +125 °C (200 °C w/HTE)
• Current rating:	1 AMP per contact
• Voltage Rating (DWV):	250 VAC RMS Sea Level
• Insulation Resistance:	5,000 Megohms min @ 100 VDC
• Shock:	100 G's discontinuity < 10 nanoseconds
• Vibration:	20 G's discontinuity < 10 nanoseconds
• Thermal Vacuum Outgassing:	NASA SP-R-0022
• Contact Resistance:	71 Milliohms max (71 mV max @ 1 AMP)
• Mating/Unmating Force:	2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

• Standard Wire:	32 AWG, Teflon Insulated per NEMA-HP3
• Insulator:	Polyphenylene Sulfide per MIL-M-24519
• Pin:	Gold Plated BeCu
• Socket:	Gold Plated Copper Alloy
• Encapsulant:	Epoxy

Single Row Nano Strip

NPS-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each guide post hole

Add 3 contact cavities for each mounting hole

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .025"

Add fixed end length constant

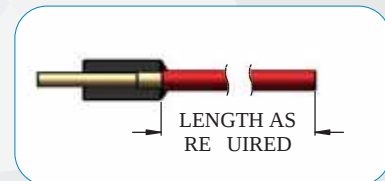
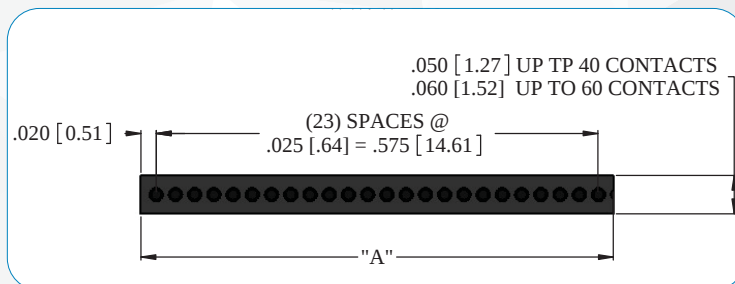
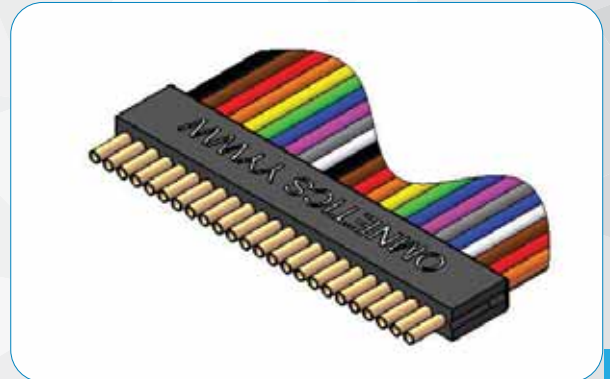
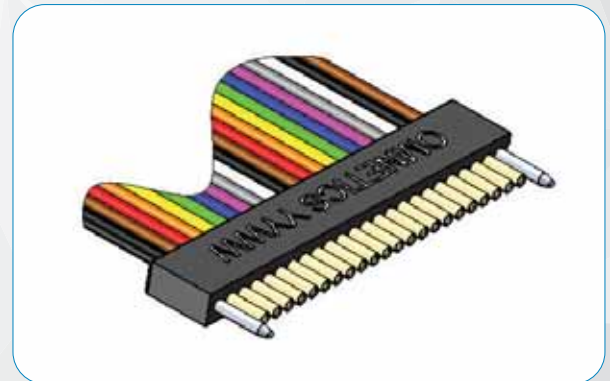
Total Length (Dimension A):

.040

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48).

Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

NSS-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts

Add 1 contact cavity for each guide post

Total contact cavities

Subtract 1 from the total to get the number of cavity spaces and multiply by .025"

Add fixed end length constant

Total Length (Dimension A):

Notes: Maximum length @ .050" thick = 1.015" (25.78). Maximum number of contact cavities is 60. Maximum length @ .060" thick = 1.515" (38.48). Number of contacts must be reduced to accommodate guide post holes and mounting holes. Default locations for guide post holes may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Single Row Nano Strip

PRE-WIRED/CABLE (TYPE WD/WC) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	WIRE LENGTH	COLOR CODED	COMMON OPTIONS
NPS PIN CONNECTOR 	02 - 60	WD DISCRETE WIRES	18.00 =18.00" STANDARD	C 10 REPEATING COLORS PER MIL-STD 681  Y ALL OTHER WIRE COLORS	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES  
	02-40 (.050"THK BODY) 41-60 (.060"THK BODY)	TW TWISTED WIRES WC CABLE WX MULTIPLE WIRE TYPES	XX.XX CUSTOM LENGTH i.e. 23.40 =23.40" 32 AWG Standard/MAX		M MOUNTING HOLE  HT HIGH TEMP
NSS SOCKET CONNECTOR 			 		RoHS RoHS COMPLIANT  CS CUSTOMER SUPPLIED MATERIAL

EXAMPLES:



NPS-24-WD-18.00-C



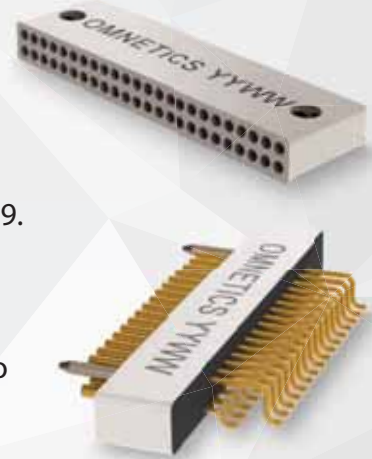
NSS-22-WD-18.0-C-GS

Dual Row Nano Strip

HORIZONTAL SMT (TYPE AA)

Dual Row Horizontal Nano Strip connectors offer an extremely low profile package that is well suited to pick and place methods. They have a very tight pitch of .025" (.64 mm) centerlines. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications.

These connectors are available in standard sizes ranging from 2 to 80 positions, as well as custom configurations.



ELECTRO-MECHANICAL SPECS

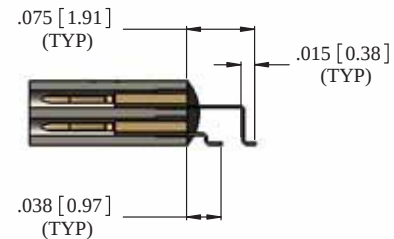
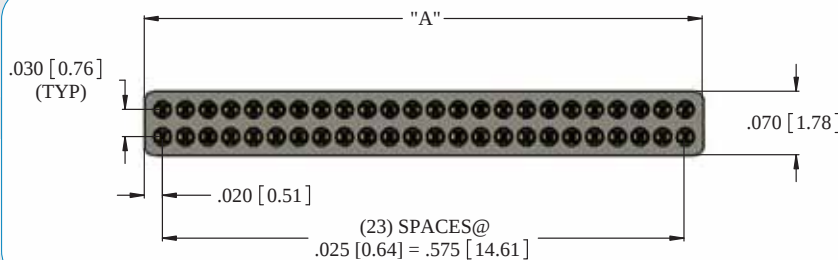
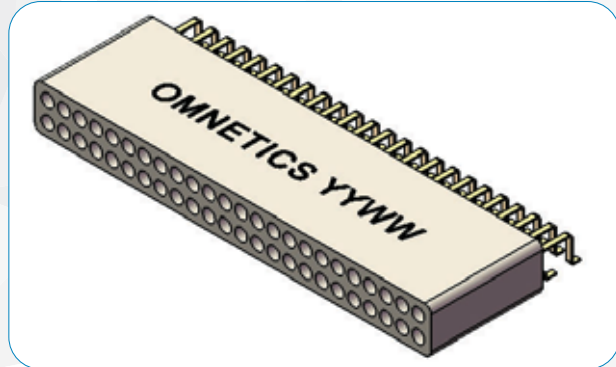
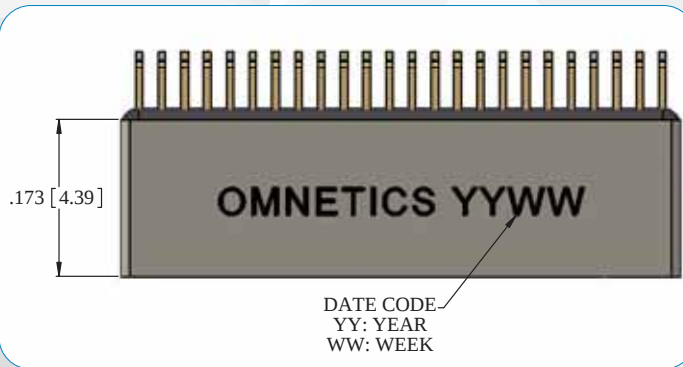
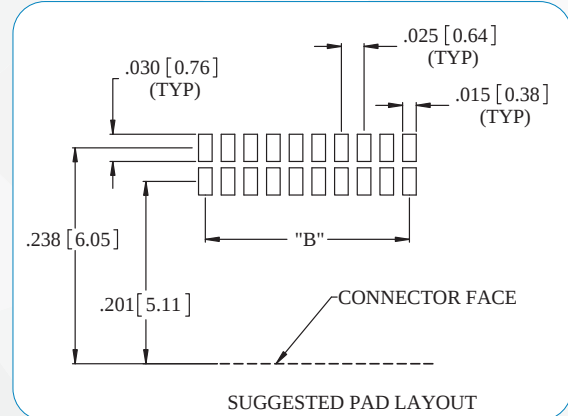
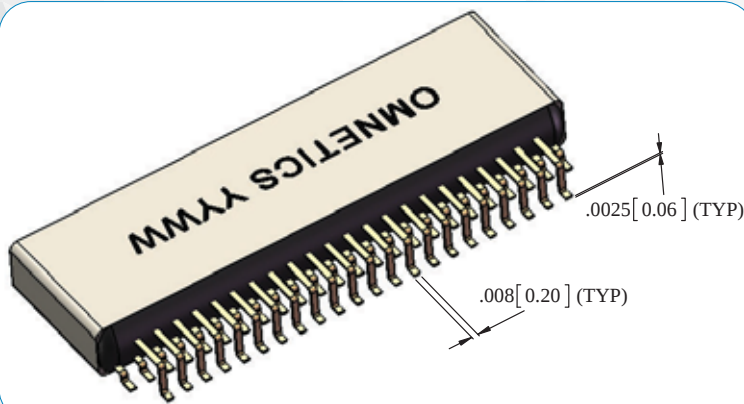
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Nano Strip

NPD-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

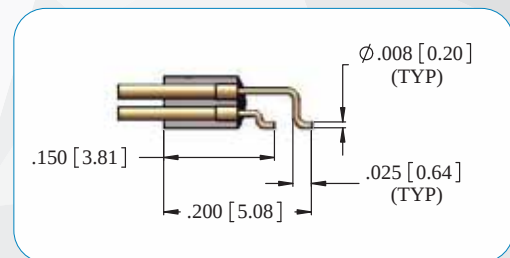
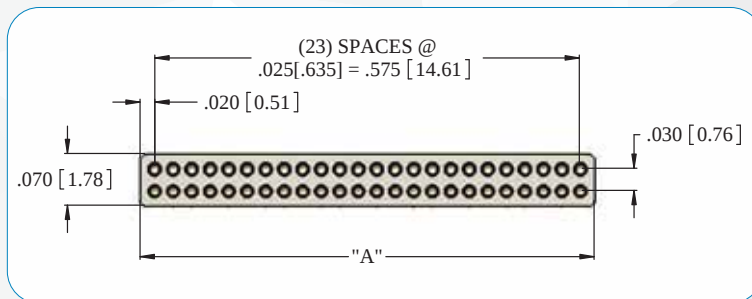
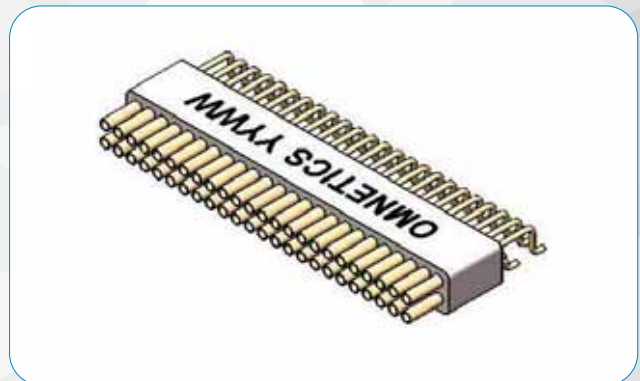
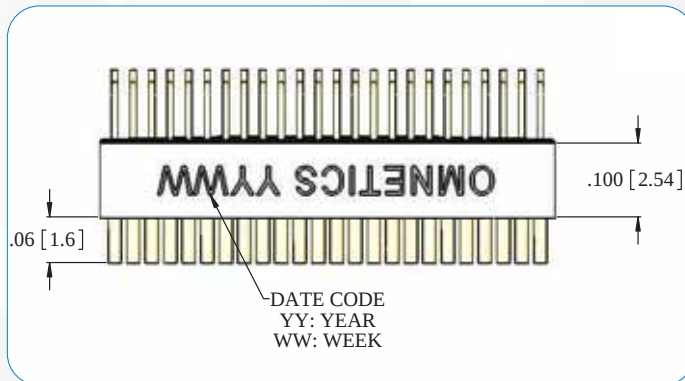
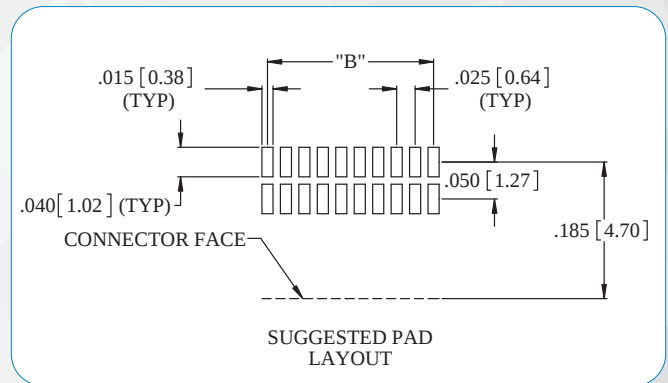
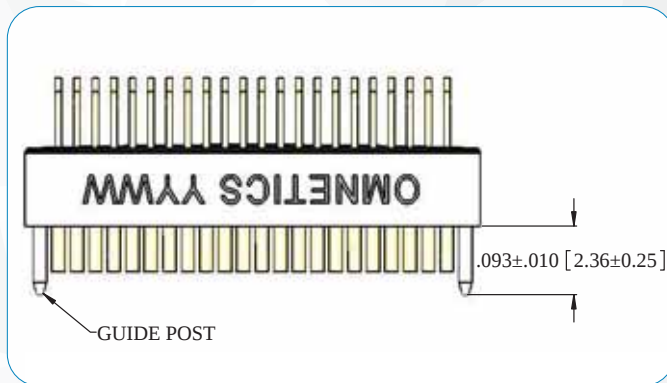
Multiply the number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

NSD-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

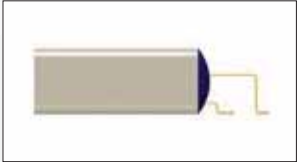
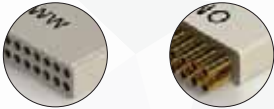
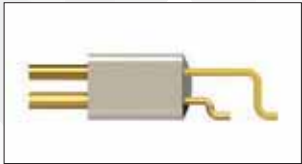
Multiply the total number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPD PIN CONNECTOR	02-80	AA	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			
NSD SOCKET CONNECTOR			M MOUNTING HOLE HT HIGH TEMP
			
			RoHS RoHS COMPLIANT
			

EXAMPLES:



NPD-48-AA



NSD-34-AA-GS

Dual Row Nano Strip

STRAIGHT TAIL (TYPE DD)

Dual Row Nano Strip connectors are configured with simple straight tails (Integral and Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits, these ruggedized Nano connectors are designed on .025" (.64 mm) centerlines. Straight tails are commonly used in a variety of wrap termination such as neuroscience related applications. These connectors feature Omnetics' gold plated Flex Pin contact system that conforms to the requirements of MIL-DTL-32139. These connectors are available in standard sizes ranging from 2 through 80 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



ELECTRO-MECHANICAL SPECS

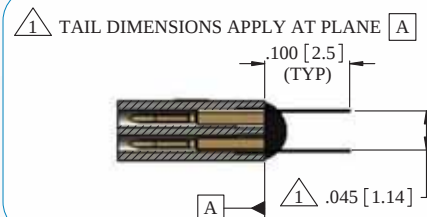
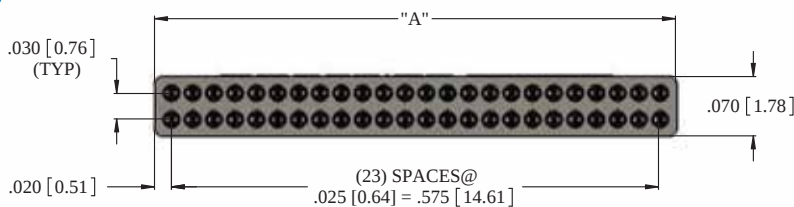
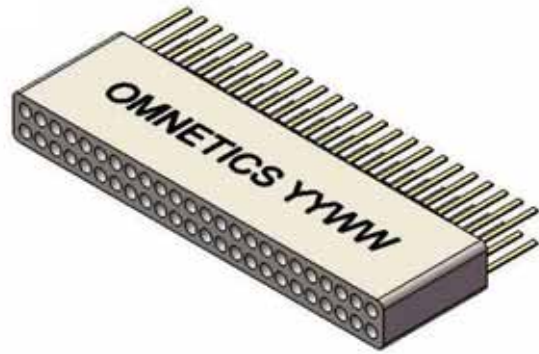
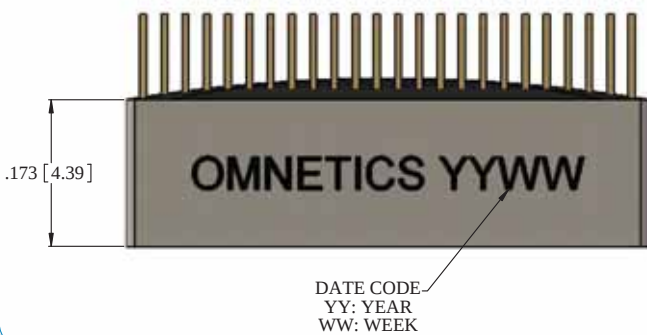
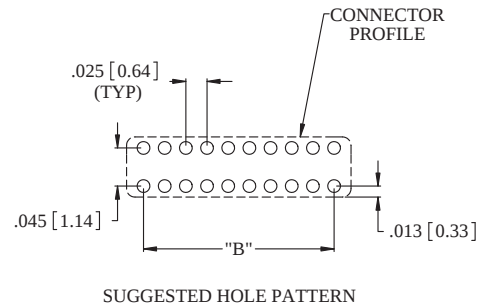
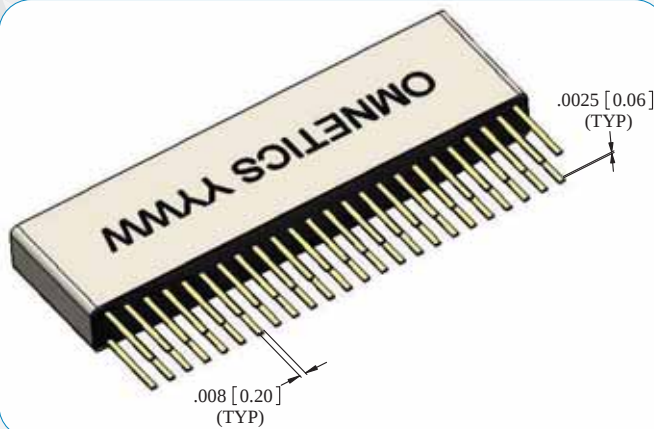
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Nano Strip

NPD-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

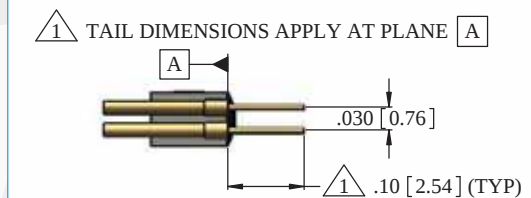
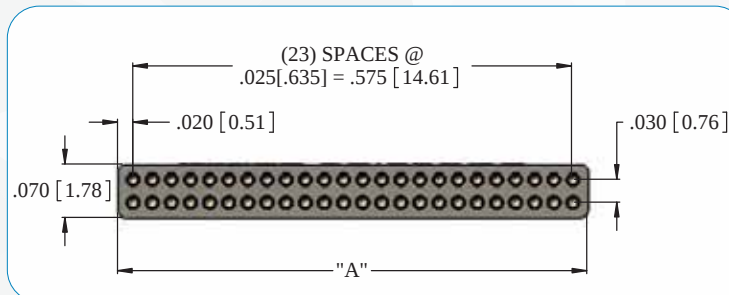
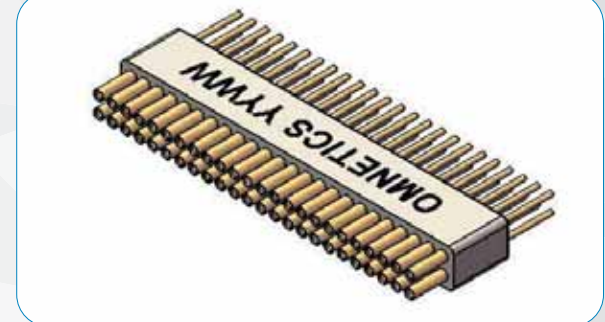
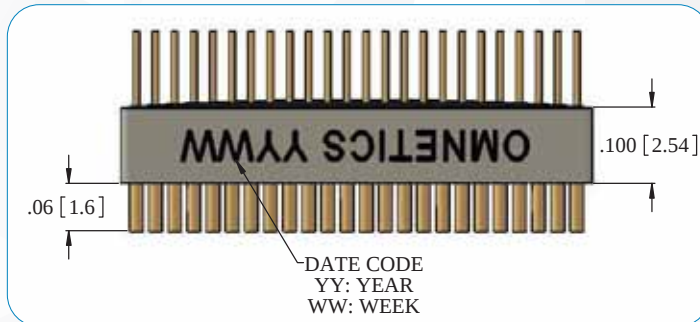
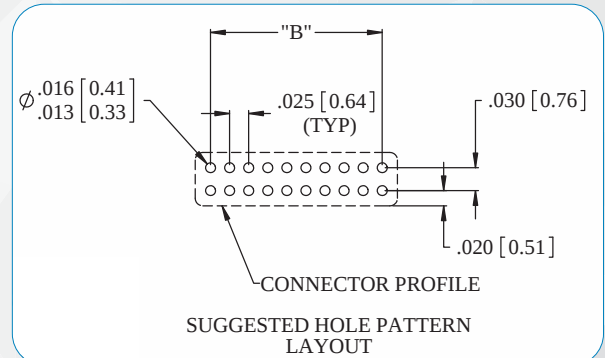
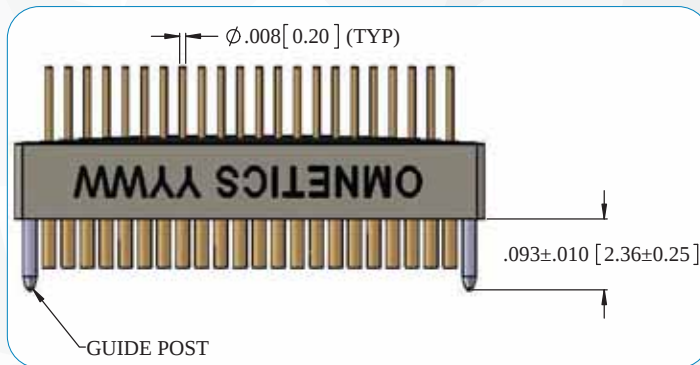
Multiply the number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

NSD-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

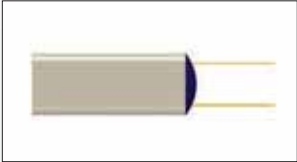
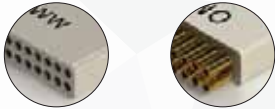
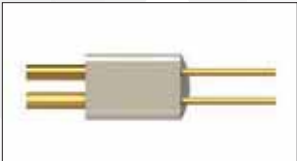
Multiply the total number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

STRAIGHT TAIL (TYPE DD) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPD PIN CONNECTOR	02 - 80	DD	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			
NSD SOCKET CONNECTOR			M MOUNTING HOLE
			
			HT HIGH TEMP
			RoHS RoHS COMPLIANT
			

EXAMPLES:



NPD-46-DD-GS



NSD-48-DD-S-RoHS

Dual Row Nano Strip

FLEX TAIL (TYPE FF)

Flex Mount Nano Strip connectors are a low profile ruggedized connector spaced on .025" (.64 mm) centerlines. The flex tails are formed together in an hourglass shape, allowing a double sided flex circuit to slide between the 2 rows. The spring tension holds the flex in place during the soldering process. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are suitable for the most demanding applications. These connectors are available in standard sizes ranging from 2 through 80 positions as well as custom configurations.

Flex design and installation service is also available from Omnetics. Please contact us for more information.



ELECTRO-MECHANICAL SPECS

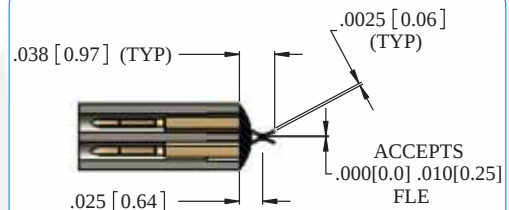
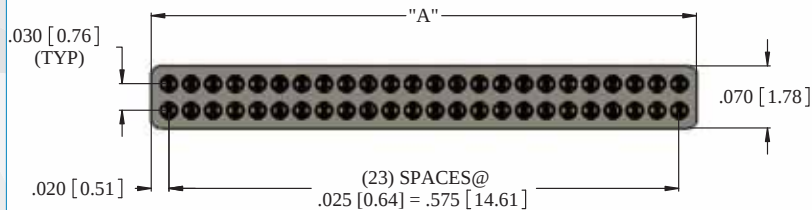
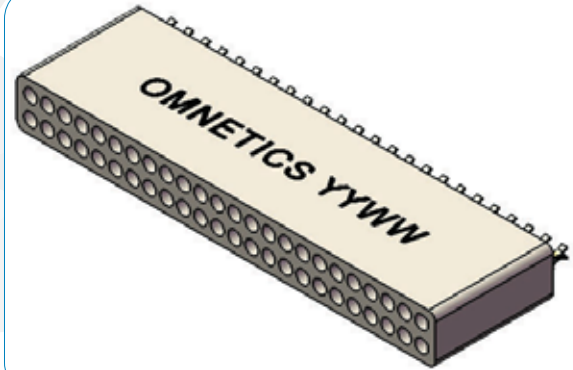
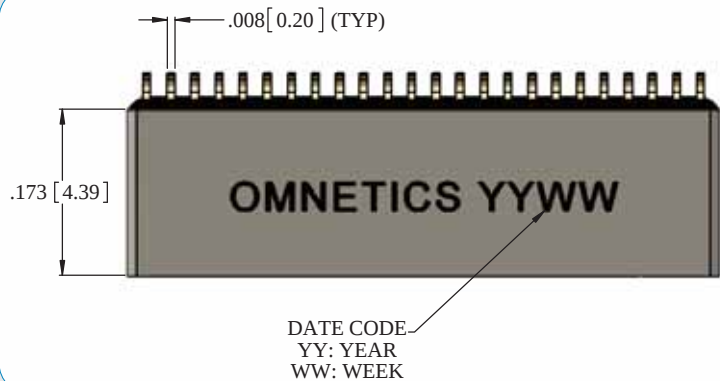
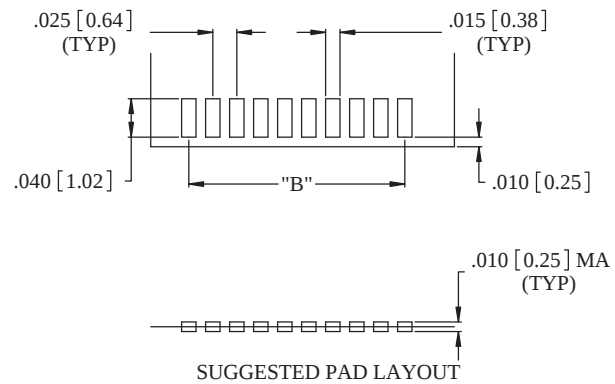
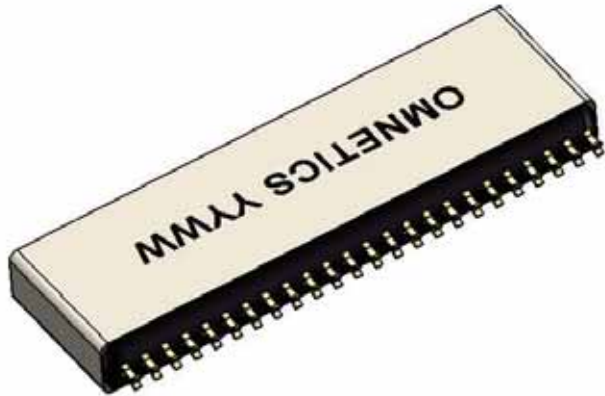
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Nano Strip

NPD-FF LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	_____
Add 1 contact cavity for each guide post hole in the same row	_____
Total contact cavities in a single row	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add fixed end length constant	.040"
Total Length (Dimension A)	_____

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

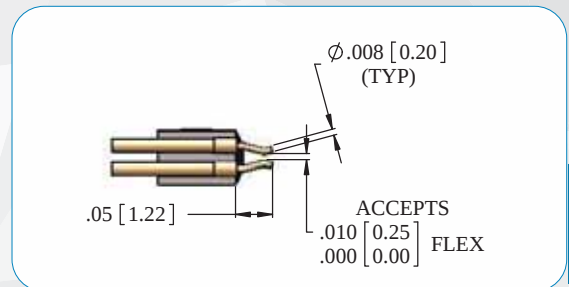
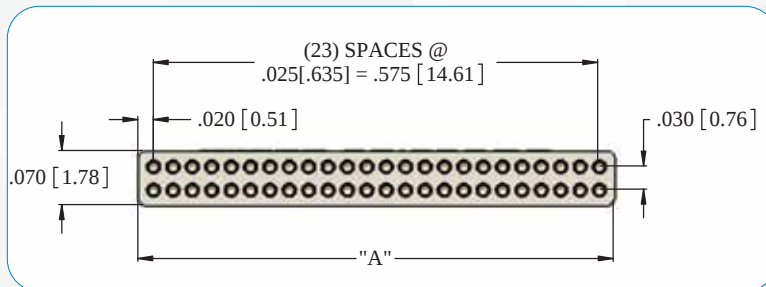
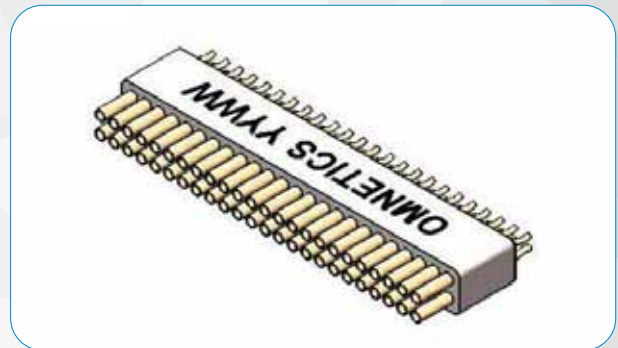
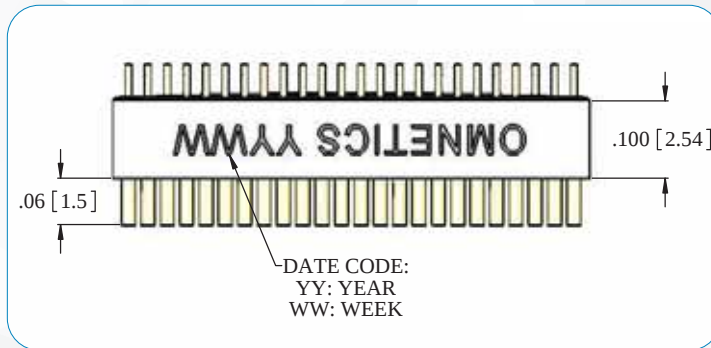
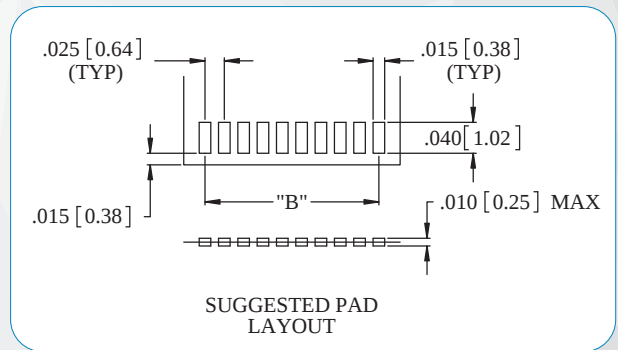
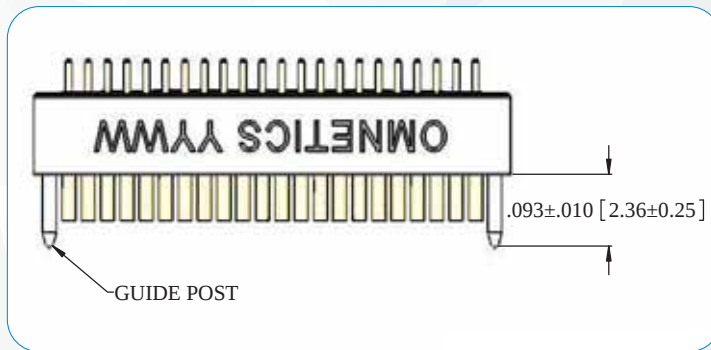
Multiply the number of contacts in one row minus 1 by .025"	_____
If hardware features are within the contact area:	_____
Add .025" for each guide post hole in the same row	_____
Total Length (Dimension B)	_____

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

NSD-FF LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	_____
Add 1 contact cavity for each guide post hole in the same row	_____
Total contact cavities in a single row	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add fixed end length constant	.040"
Total Length (Dimension A)	_____

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the total number of contacts in one row minus 1 by .025"	_____
If hardware features are within the contact area:	_____
Add .025" for each guide post hole in the same row	_____
Total Length (Dimension B)	_____

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

FLEX TAIL (TYPE FF) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPD PIN CONNECTOR	02 - 80	FF	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			 
NSD SOCKET CONNECTOR			M MOUNTING HOLE
			
			HT HIGH TEMP
			RoHS RoHS COMPLIANT
			

EXAMPLES:



NPD-48-FF



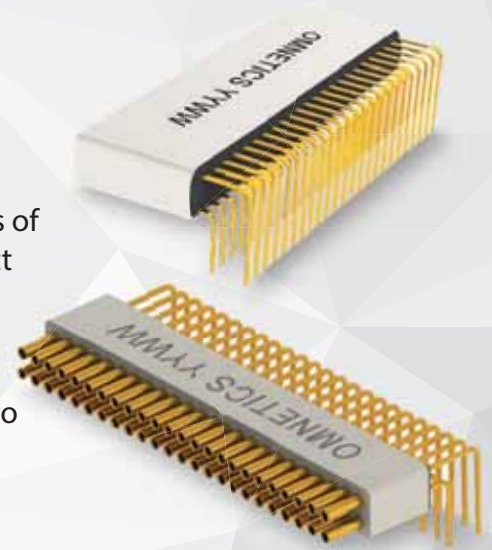
NSD-34-FF-GS-RoHS

Dual Row Nano Strip

HORIZONTAL THRU-HOLE (TYPE H2)

The Dual Row horizontal Thru-Hole Nano Strip connectors have contacts arranged on .025 (.64 mm) centerlines. Thru-Hole tails are arranged in a .025 x .50" grid, allowing space for traces and annular rings. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications. They are available with mounting holes suitable for PCB and flex mounting.

These connectors are available in standard sizes ranging from 2 to 80 positions, as well as custom configurations.



ELECTRO-MECHANICAL SPECS

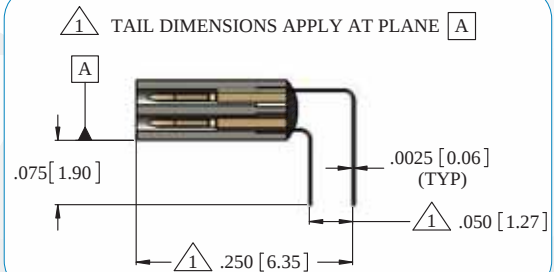
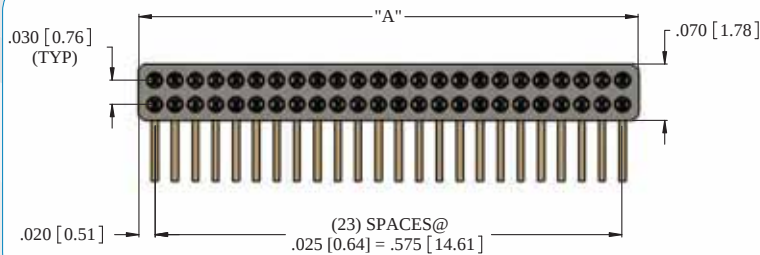
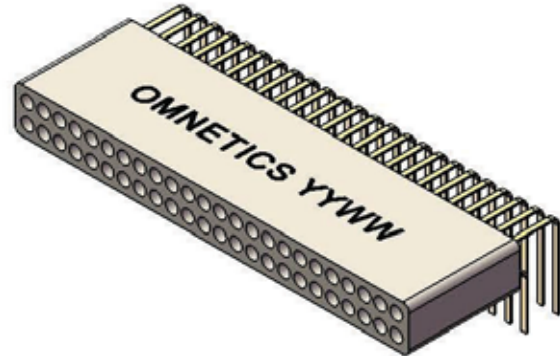
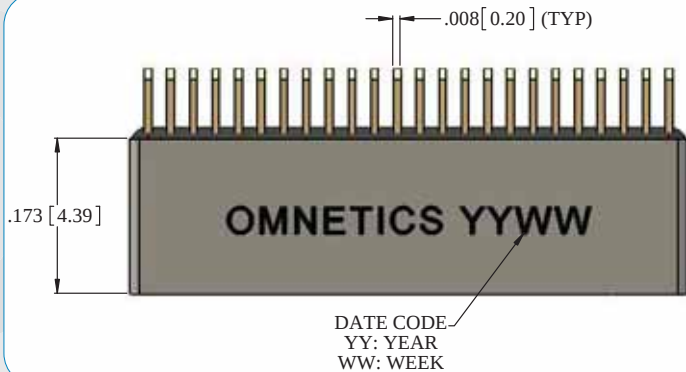
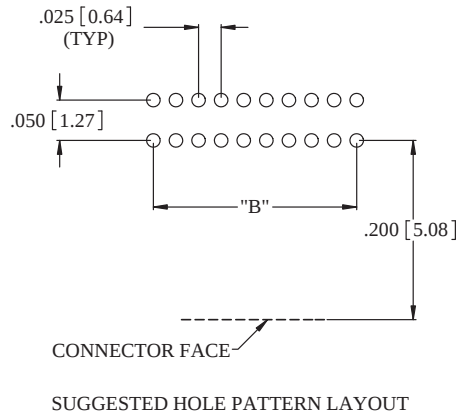
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Nano Strip

NPD-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

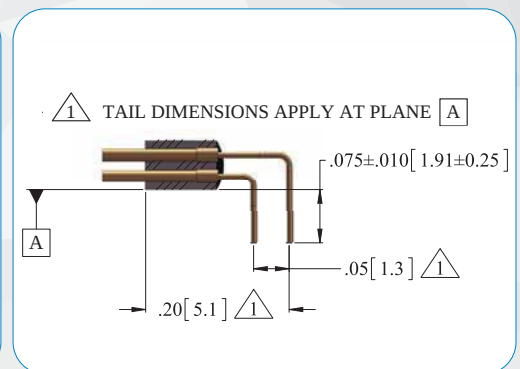
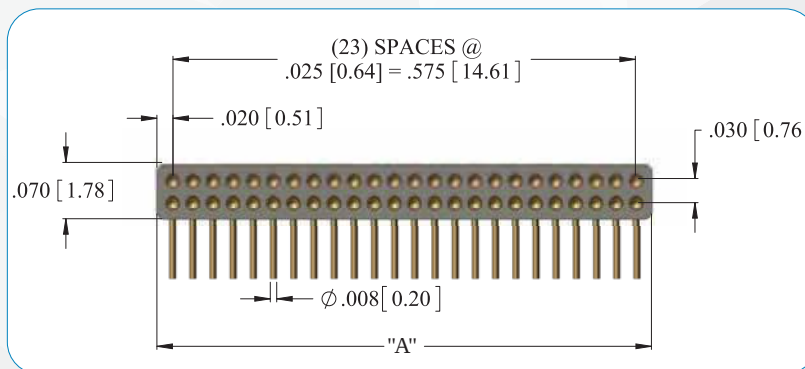
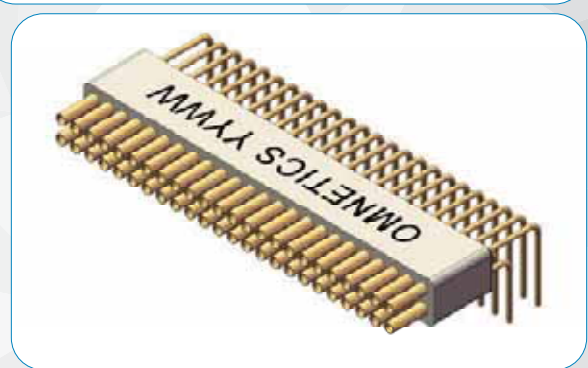
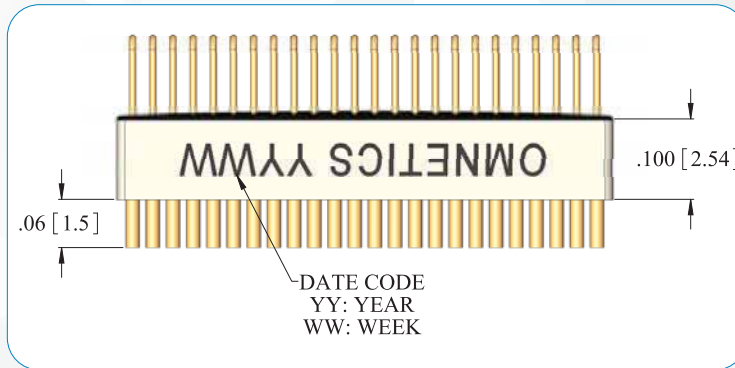
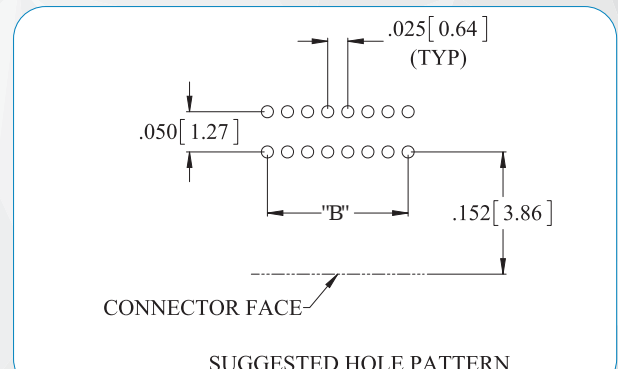
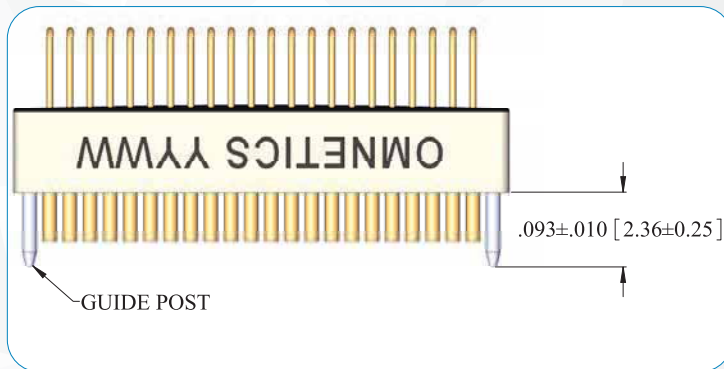
Multiply the number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

NSD-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

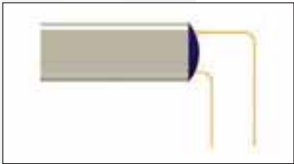
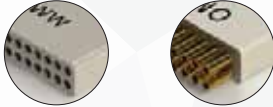
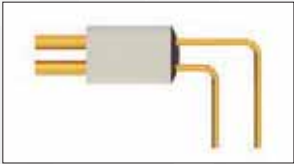
Multiply the total number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

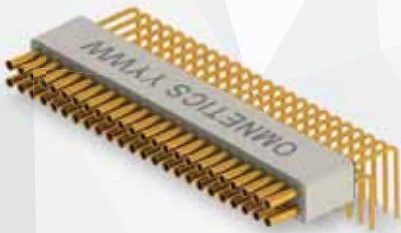
SHORT/LONG ALT. THRU HOLE TAIL (TYPE H2) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPD PIN CONNECTOR	02 - 80	H2	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			
NSD SOCKET CONNECTOR			M MOUNTING HOLE
			
			HT HIGH TEMP
			RoHS RoHS COMPLIANT
			

EXAMPLE:



NPD-48-H2-RoHS



NSD-48-H2-RoHS

Dual Row Nano Strip

VERTICAL SMT (TYPE VV)

Vertical SMT Nano Strip connectors require a minimal amount of board space on flex circuits and rigid circuit boards. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL 32139. These rugged lightweight connectors are suitable for the most demanding applications.

These connectors are available in standard sizes ranging from 2 to 80 positions, as well as custom configurations.



ELECTRO-MECHANICAL SPECS

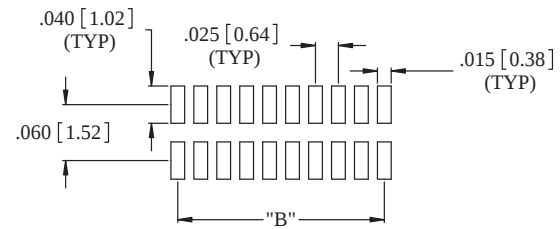
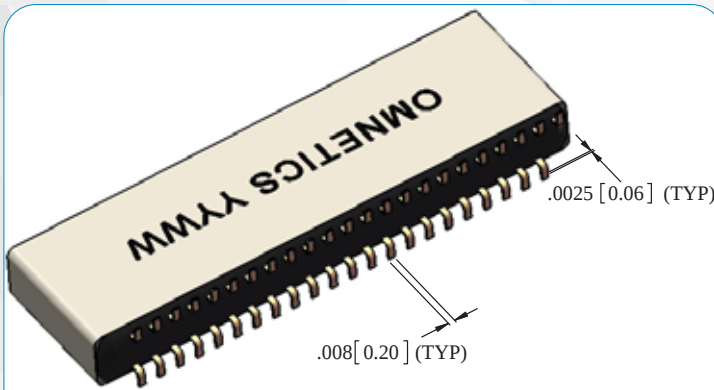
- Durability: 2000 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

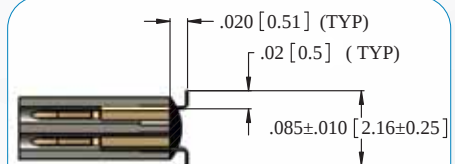
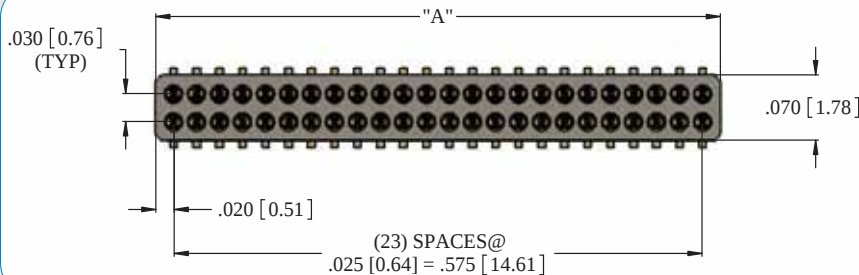
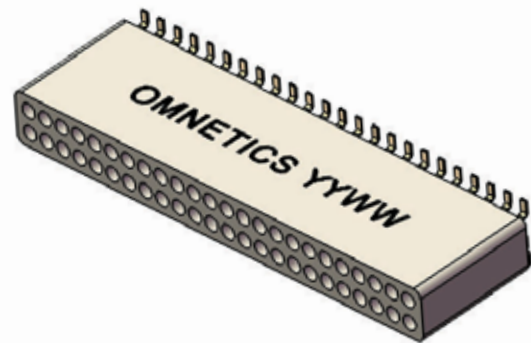
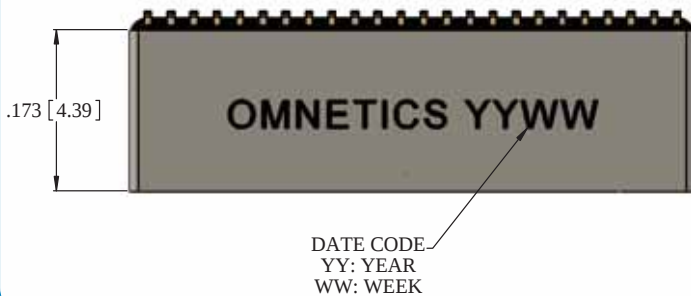
- Standard Socket PCB Tail Termination: Soldered per J-STD-006 (Non-RoHS)
- Standard Pin PCB Tail Termination: Solder plated per AMS-P-81728 (Non-RoHS)
- RoHS Pin PCB Tail Termination: Hard gold plated per ASTM B488
- RoHS Socket PCB Tail Termination: Hard gold plated per ASTM B488
- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Dual Row Nano Strip

NPD-VV LAYOUT



SUGGESTED PAD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	_____
Add 1 contact cavity for each guide post hole in the same row	_____
Total contact cavities in a single row	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add fixed end length constant	.040"
Total Length (Dimension A)	_____

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

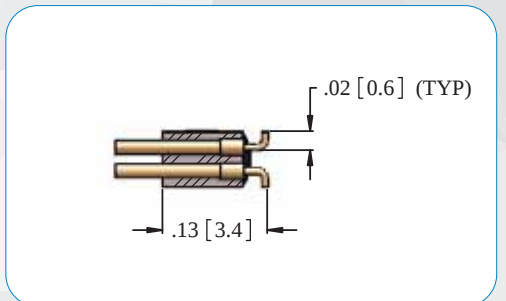
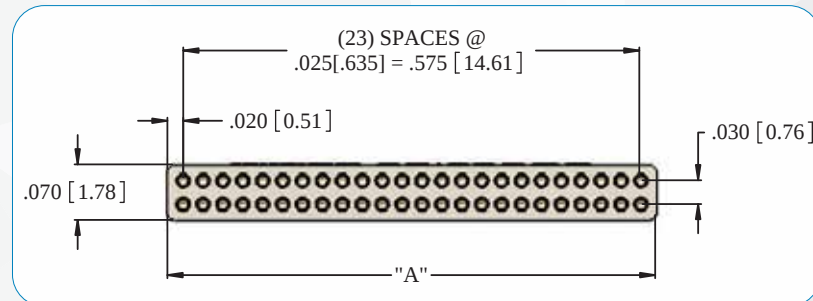
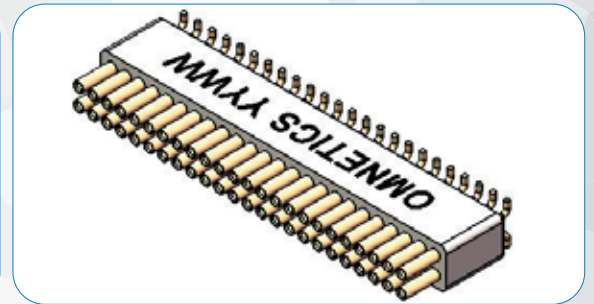
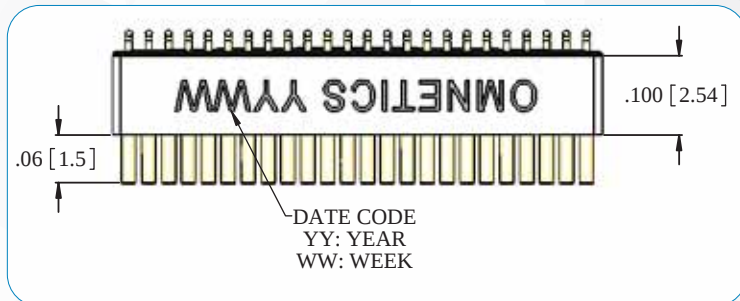
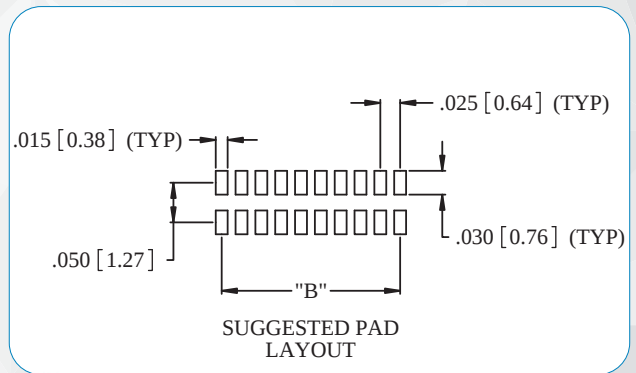
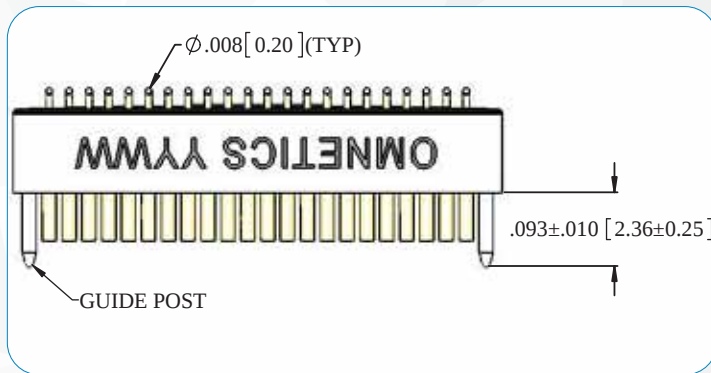
Multiply the number of contacts in one row minus 1 by .025"	_____
If hardware features are within the contact area:	_____
Add .025" for each guide post hole in the same row	_____
Total Length (Dimension B)	_____

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

NSD-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	
Add 1 contact cavity for each guide post hole in the same row	
Total contact cavities in a single row	
Multiply the number of contact cavities minus 1 by .025"	
Add fixed end length constant	.040"
Total Length (Dimension A)	

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer.

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

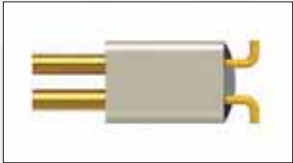
Multiply the total number of contacts in one row minus 1 by .025"	
If hardware features are within the contact area:	
Add .025" for each guide post hole in the same row	
Total Length (Dimension B)	

Notes: Maximum length .575" (14.61). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes.

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

VERTICAL SMT (TYPE VV) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
NPD PIN CONNECTOR	02 - 80	VV	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
			 
NSD SOCKET CONNECTOR			M MOUNTING HOLE HT HIGH TEMP
			
			RoHS RoHS COMPLIANT
			

EXAMPLES:



NPD-48-VV



NSD-34-VV-GS

Dual Row Nano Strip

PRE-WIRED/CABLE (TYPE WD/WC)

Pre-wired Dual Row Nano Strip connectors assemblies are crimped using proprietary semiautomated crimping systems. Due to their small size and precision required to make these quality crimps, hand crimping is not an option. Pre-crimped wires and contacts are potted in place further protecting the integrity of the crimp joint. Building these parts to order allows for maximum flexibility in wire type, size and color coding. Commercial Off The Shelf (COTS) versions are also available with 18" of color coded 30 AWG Teflon wire for quick turn around.



These connectors are available in standard sizes ranging from 2 through 48 positions as well as custom configurations, and accept wires 30 AWG to 36 AWG stranded wire.

ELECTRO-MECHANICAL SPECS

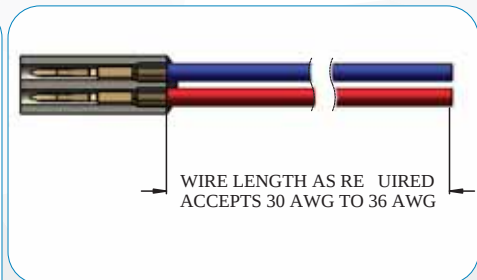
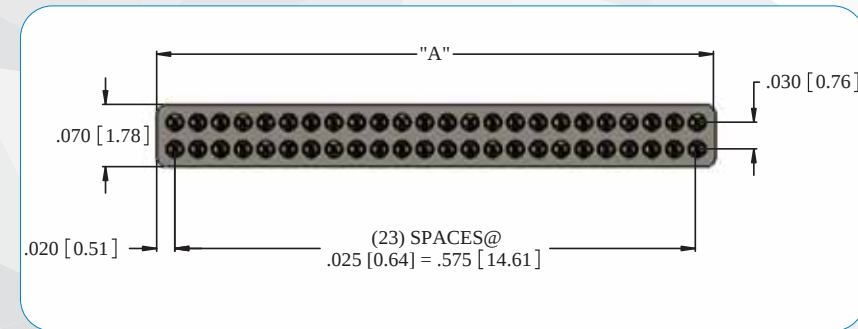
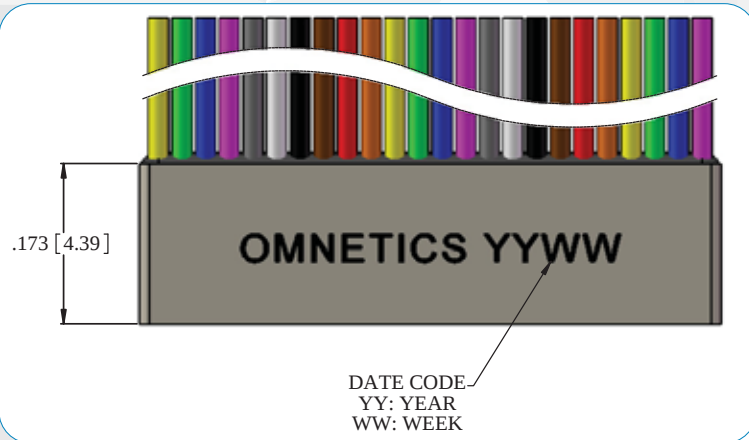
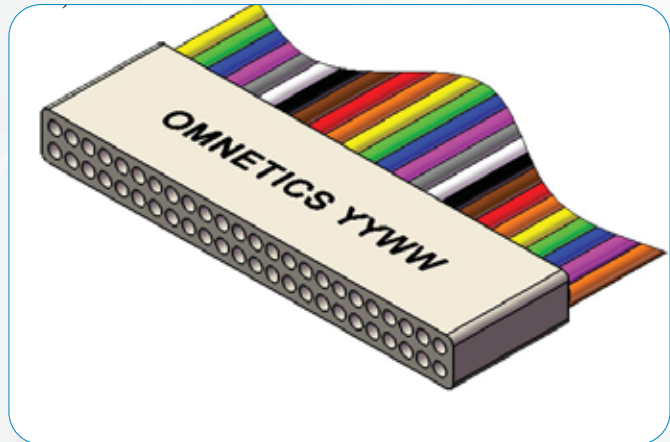
- Durability: _____ 2000 Cycles
- Temperature: _____ -55°C to +125 °C (200 °C w/HTE)
- Current rating: _____ 1 AMP per contact
- Voltage Rating (DWV): _____ 250 VAC RMS Sea Level
- Insulation Resistance: _____ 5,000 Megohms min @ 100 VDC
- Shock: _____ 100 G's discontinuity < 10 nanoseconds
- Vibration: _____ 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: _____ NASA SP-R-0022
- Contact Resistance: _____ 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Standard Wire: _____ 32 AWG, Teflon Insulated per NEMA-HP3
- Insulator: _____ Polyphenylene Sulfide per MIL-M-24519
- Pin: _____ Gold Plate BeCu
- Socket: _____ Gold Plated Copper Alloy
- Encapsulant: _____ Epoxy

Dual Row Nano Strip

NPD-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Add 1 contact cavity for each guide post hole in the same row

Total contact cavities in a single row

Subtract 1 from the total to get the number of cavity spaces and multiply by .025"

Add fixed end length constant

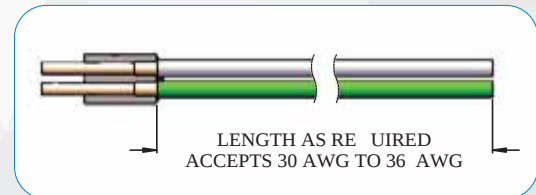
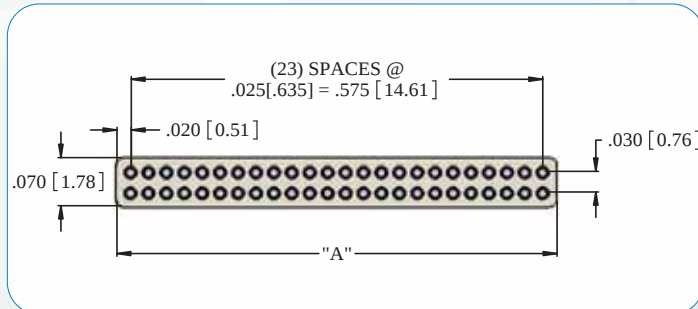
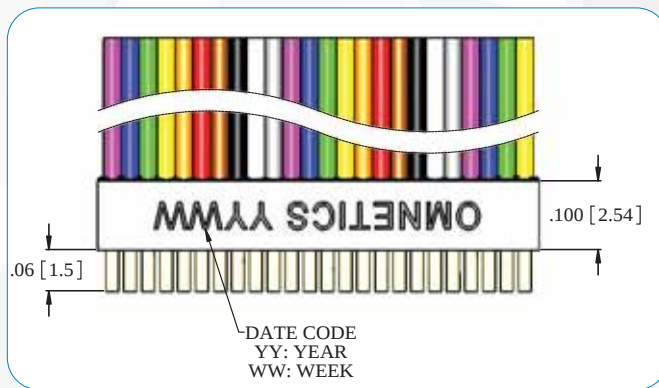
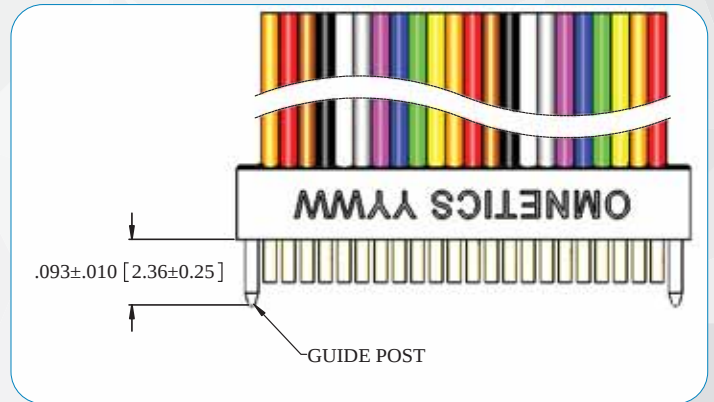
Total Length (Dimension A):

.040

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

NSD-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Add 1 contact cavity for each guide post hole in the same row

Total contact cavities in a single row

Subtract 1 from the total to get the number of cavity spaces and multiply by .025"

Add fixed end length constant

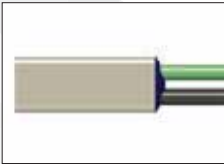
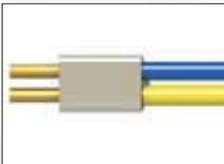
Total Length (Dimension A):

.040

Notes: Maximum length .615" (15.62). Maximum number of contact cavities is 80. Number of contacts must be reduced to accommodate guide post holes. Default locations for guide post holes may be changed by customer. Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Dual Row Nano Strip

PRE-WIRED/CABLE (TYPE WD/WC) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	WIRE LENGTH	COLOR CODED	COMMON OPTIONS
NPD PIN CONNECTOR	02 - 80	WD DISCRETE WIRES	18.00 =18.00" STANDARD	C 10 REPEATING COLORS PER MIL-STD 681	G GUIDE POST/HOLE GS MULTIPLE GUIDE POSTS/HOLES
		TW TWISTED WIRES	XX.XX CUSTOM LENGTH i.e. 23.40 =23.40"		 
NSD SOCKET CONNECTOR		WC CABLE		Y ALL OTHER WIRE COLORS	M MOUNTING HOLE 
		WX MULTIPLE WIRE TYPES	32 AWG Standard/MAX		HT HIGH TEMP
					RoHS RoHS COMPLIANT
					
					CS CUSTOMER SUPPLIED MATERIAL

EXAMPLES:



NPD-48-WD-18.00-C

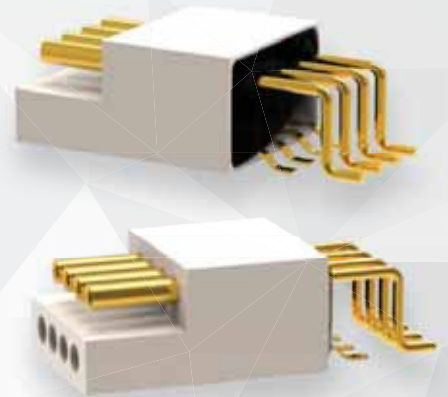


NSD-34-WD-18.00-C-GS

HORIZONTAL SMT (TYPE AA)

The Polarized Nano (PZN) connectors are designed to hold one row of pins and one row of sockets; this configuration polarizes the connector without the extra space needed for guide pins. The Dual Row Horizontal SMT Polarized Nano (PZN) connectors offer an extremely low profile package that is well suited to pick and place methods. They have a very tight pitch of .025" (.64 mm) centerlines. These PZN connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to the requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications.

The PZN connectors are available in standard sizes ranging from 4 to 24 positions.



ELECTRO-MECHANICAL SPECS

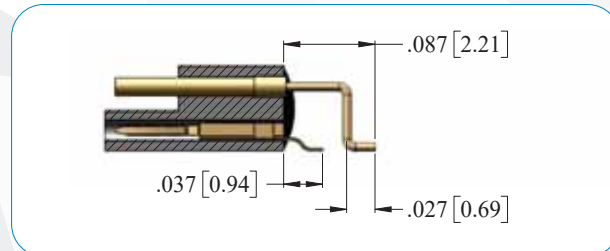
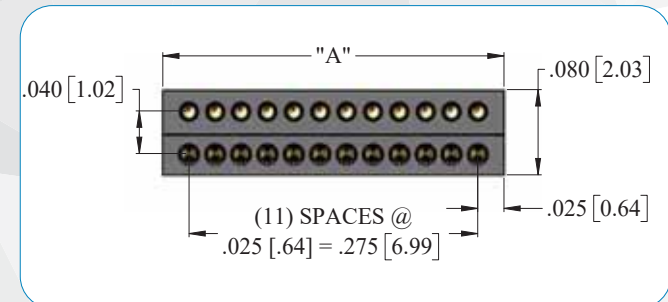
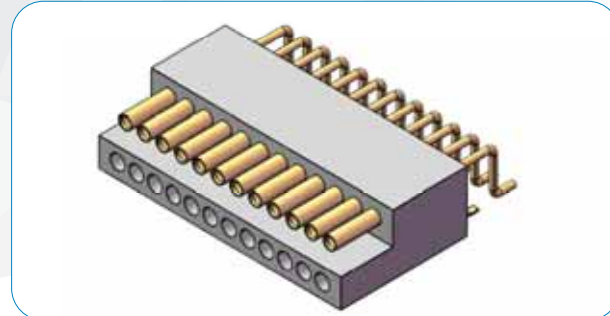
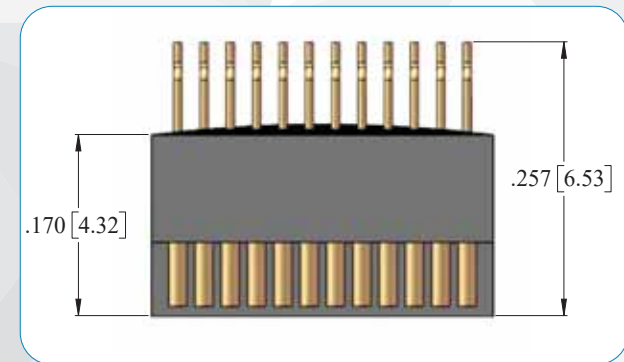
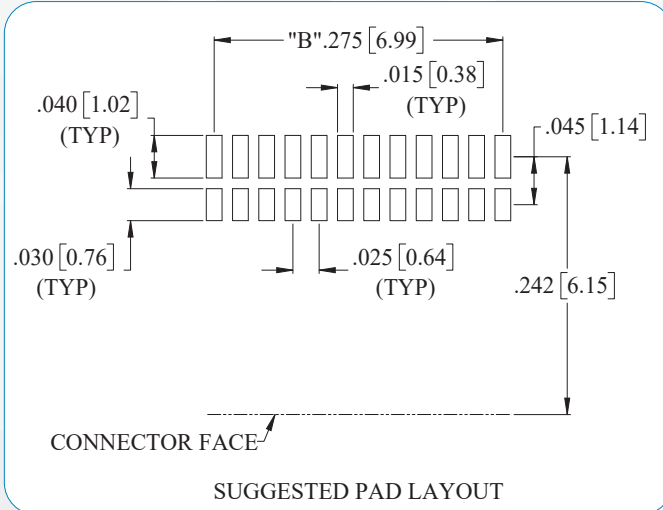
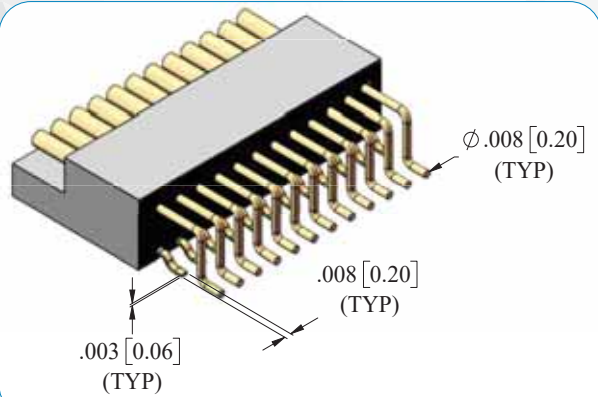
- Durability: 200 Cycles
- Temperature: -55°C to +125 °C (200 °C w/HTE)
- Current rating: 1 AMP per contact
- Voltage Rating (DWV): 250 VAC RMS Sea Level
- Insulation Resistance: 5,000 Megohms min @ 100 VDC
- Shock: 100 G's discontinuity < 10 nanoseconds
- Vibration: 20 G's discontinuity < 10 nanoseconds
- Thermal Vacuum Outgassing: NASA SP-R-0022
- Contact Resistance: 71 Milliohms max (71 mV max @ 1 AMP)
- Mating/Unmating Force: 2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

- Insulator: Polyphenylene Sulfide per MIL-M-24519
- Pin: Gold Plated BeCu
- Socket: Gold Plated Copper Alloy
- Encapsulant: Epoxy

Polarized Nano

PZN-AA LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Multiply the number of contact cavities minus 1 by .025"

Add fixed end length constant

Total Length (Dimension A)

Notes: Maximum length .325" [8.26].

Maximum number of contact cavities is 24

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contacts in one row minus 1 by .025"

Total Length (Dimension B)

Notes: Maximum length .275" [6.99].

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

HORIZONTAL SMT (TYPE AA) ORDERING GUIDE

SERIES

OF CONTACTS

TERMINATION TYPE

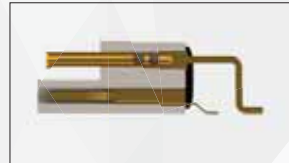
COMMON OPTIONS

PZN
Polarized Nano
Connector

04 - 24
(EVEN NUMBERS
ONLY)

AA

HT HIGH TEMP



RoHS RoHS COMPLIANT



EXAMPLES:



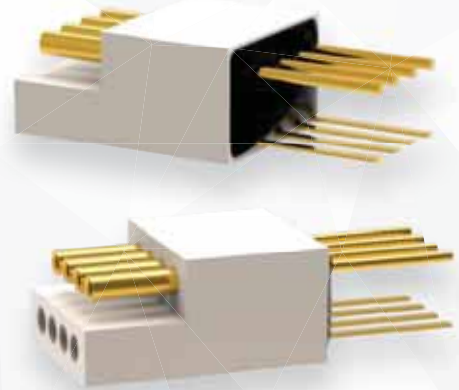
PZN-08-AA

Polarized Nano

STRAIGHT THRU-HOLE (TYPE DD)

The Polarized Nano (PZN) connectors are designed to hold one row of pins and one row of sockets; this configuration polarizes the connector without the extra space needed for guide pins. The Straight Thru-Hole (type DD) Polarized Nano (PZN) connectors are configured with simple straight tails (Integral and Crimped). Suitable for vertical thru-hole mounting to fine pitched flex circuits. These ruggedized PZN Nano connectors are designed on .025" (.64 mm) centerlines. These PZN connectors feature Omnetics' gold plated Flex Pin contact system that conforms to the requirements of MIL-DTL-32139.

The connectors are available in standard sizes ranging from 4 through 24 positions. Flex design and installation service is also available from Omnetics, please contact us for more information.



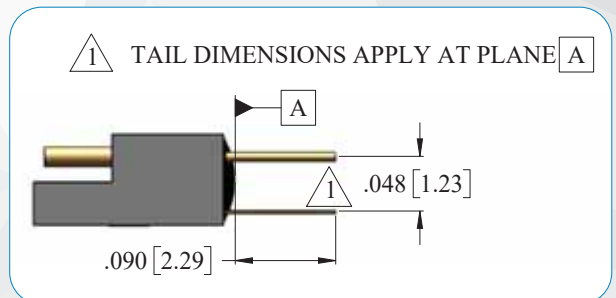
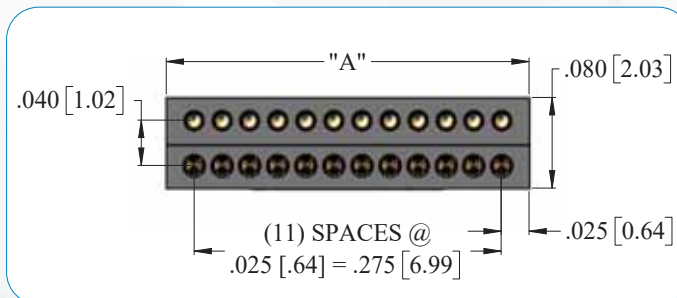
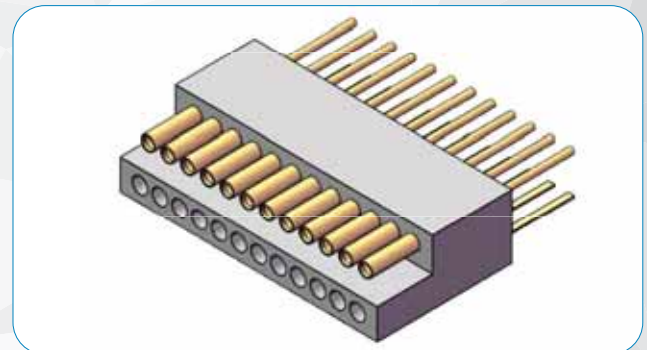
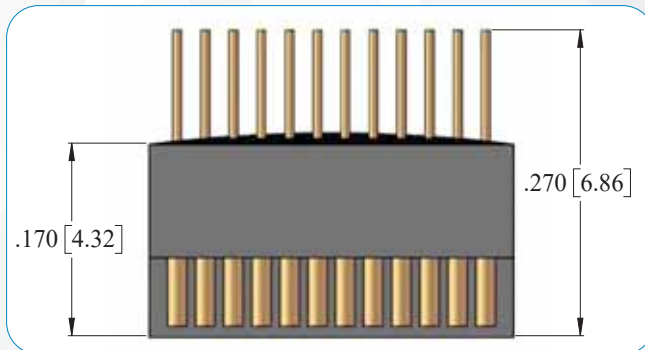
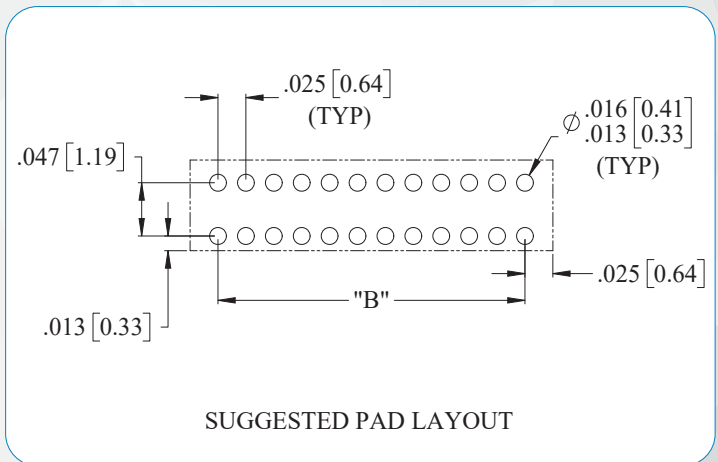
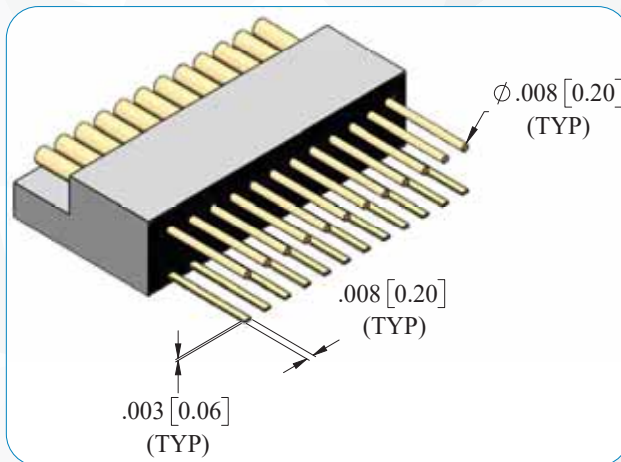
ELECTRO-MECHANICAL SPECS

Durability:	200 Cycles
Temperature:	-55°C to +125 °C (200 °C w/HTE)
Current rating:	1 AMP per contact
Voltage Rating (DWV):	250 VAC RMS Sea Level
Insulation Resistance:	5,000 Megohms min @ 100 VDC
Shock:	100 G's discontinuity < 10 nanoseconds
Vibration:	20 G's discontinuity < 10 nanoseconds
Thermal Vacuum Outgassing:	NASA SP-R-0022
Contact Resistance:	71 Milliohms max (71 mV max @ 1 AMP)
Mating/Unmating Force:	2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

Insulator:	Polyphenylene Sulfide per MIL-M-24519
Pin:	Gold Plated BeCu
Socket:	Gold Plated Copper Alloy
Encapsulant:	Epoxy

PZN-DD LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add fixed end length constant	.050"
Total Length (Dimension A)	_____

Notes: Maximum length .325" [8.26].

Maximum number of contact cavities is 24

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

Multiply the number of contacts in one row minus 1 by .025"	_____
Total Length (Dimension B)	_____

Notes: Maximum length .275" [6.99].

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Polarized Nano

STRAIGHT THRU-HOLE (TYPE DD) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PZN Polarized Nano Connector	04 - 24 (EVEN NUMBERS ONLY)	DD	HT HIGH TEMP
			RoHS RoHS COMPLIANT 

EXAMPLES:

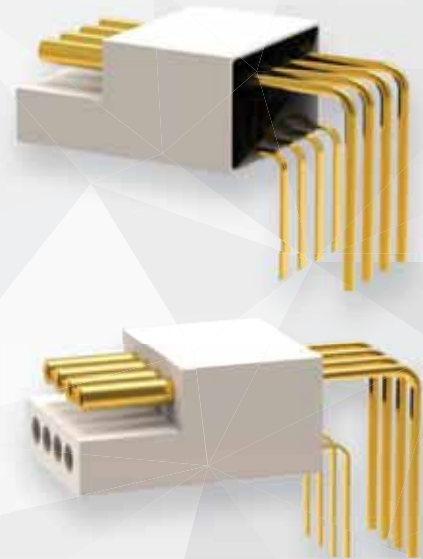


PZN-08-DD

SHORT/LONG ALT. THRU-HOLE (TYPE H2)

The Polarized Nano (PZN) connectors are designed to hold one row of pins and one row of sockets; this configuration polarizes the connector without the extra space needed for guide pins. The Horizontal Thru-Hole (type H2) PZN connectors have contacts arranged on .025 (.64 mm) centerlines. The PZN H2 thru-hole tails are arranged in a .025 x .50" grid, allowing space for traces and annular rings. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system, conforming to requirements of MIL-DTL-32139. These durable lightweight connectors are perfect for the most demanding applications.

PZN connectors are available in standard sizes ranging from 4 to 24 positions.



ELECTRO-MECHANICAL SPECS

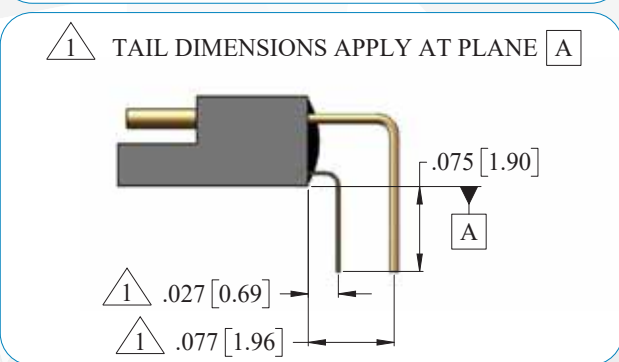
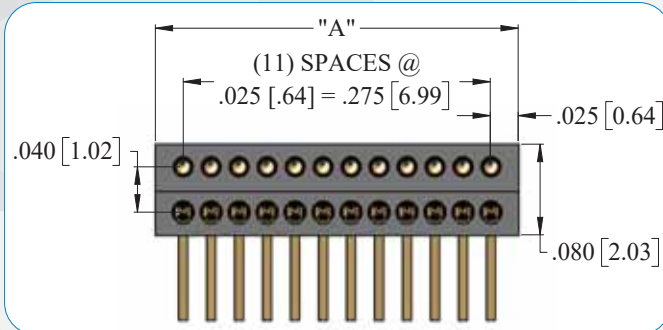
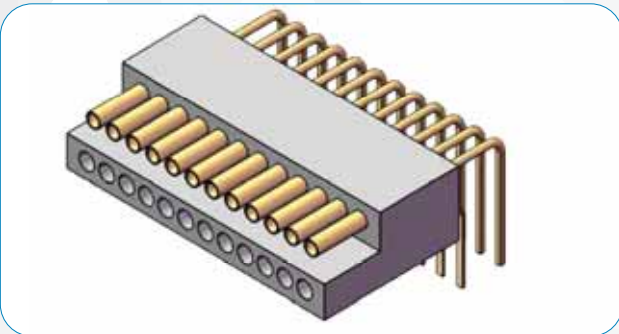
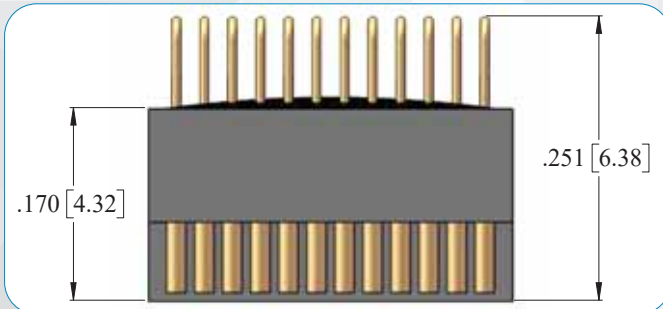
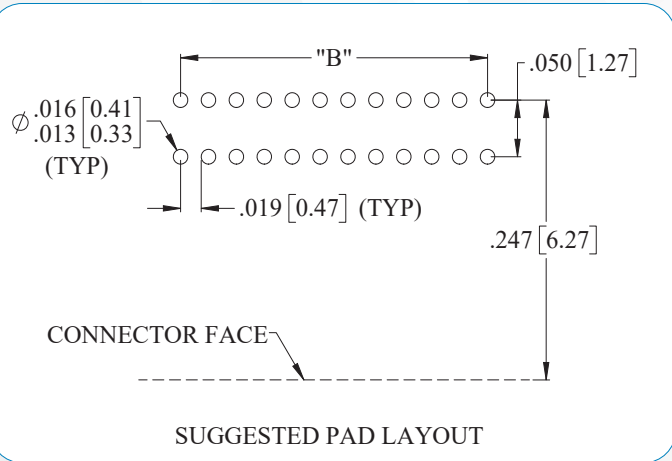
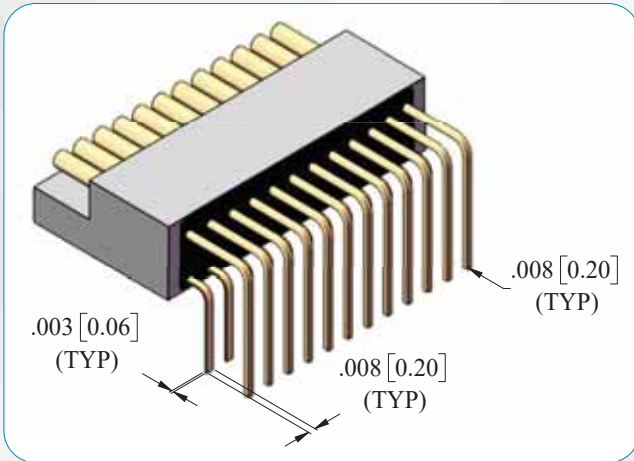
Durability:	200 Cycles
Temperature:	-55°C to +125 °C (200 °C w/HTE)
Current rating:	1 AMP per contact
Voltage Rating (DWV):	250 VAC RMS Sea Level
Insulation Resistance:	5,000 Megohms min @ 100 VDC
Shock:	100 G's discontinuity < 10 nanoseconds
Vibration:	20 G's discontinuity < 10 nanoseconds
Thermal Vacuum Outgassing:	NASA SP-R-0022
Contact Resistance:	71 Milliohms max (71 mV max @ 1 AMP)
Mating/Unmating Force:	2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

Insulator:	Polyphenylene Sulfide per MIL-M-24519
Pin:	Gold Plated BeCu
Socket:	Gold Plated Copper Alloy
Encapsulant:	Epoxy

Polarized Nano

PZN-H2 LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Multiply the number of contact cavities minus 1 by .025"

Add fixed end length constant

Total Length (Dimension A)

Notes: Maximum length .325" [8.26].

Maximum number of contact cavities is 24

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

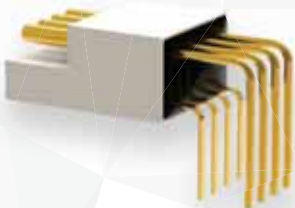
Multiply the number of contacts in one row minus 1 by .025"

Total Length (Dimension B)

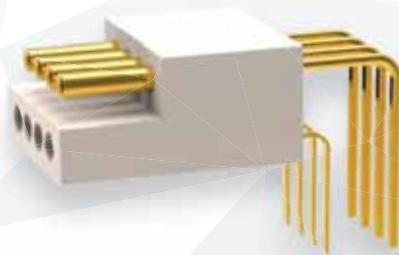
Notes: Maximum length .275" [6.99].

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

SHORT/LONG ALT. THRU-HOLE (TYPE H2) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PZN Polarized Nano Connector	04 - 24 (EVEN NUMBERS ONLY)	H2	HT HIGH TEMP RoHS RoHS COMPLIANT
			

EXAMPLES:



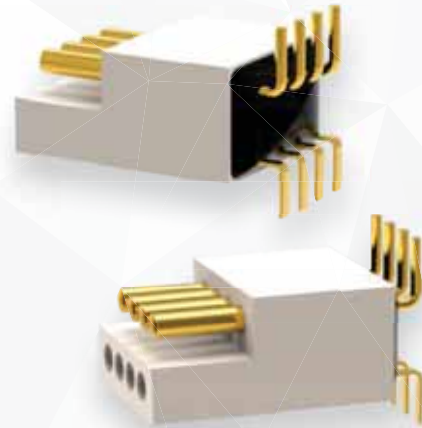
PZN-08-H2

Polarized Nano

VERTICAL SMT (TYPE VV)

The Polarized Nano (PZN) connectors are designed to hold one row of pins and one row of sockets; this configuration polarizes the connector without the extra space needed for guide pins. The Vertical SMT PZN connectors require a minimal amount of board space on flex circuits and rigid circuit boards. These connectors feature Omnetics' highly reliable gold plated Flex Pin contact system conforming to the requirements of MIL-DTL 32139. These rugged lightweight connectors are suitable for the most demanding applications.

The PZN connectors are available in standard sizes ranging from 4 to 24 positions.



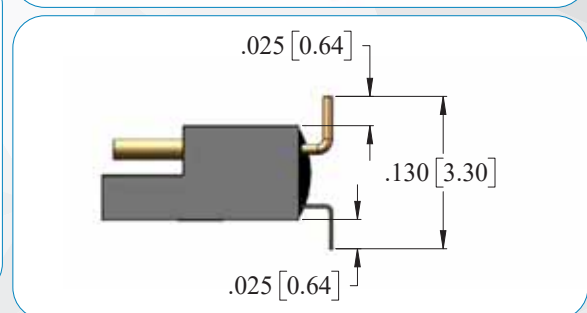
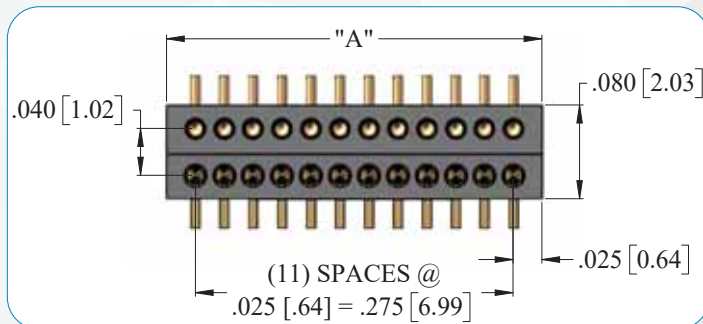
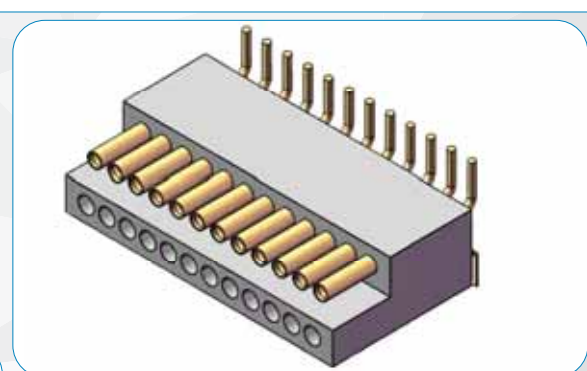
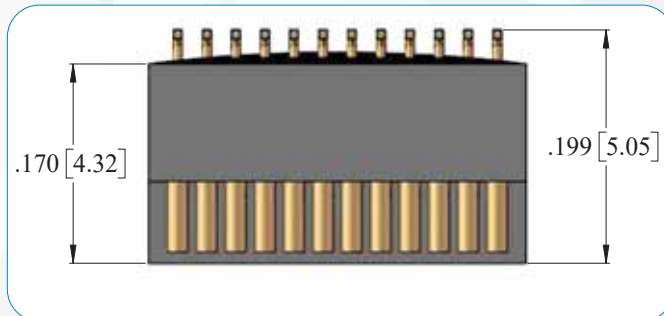
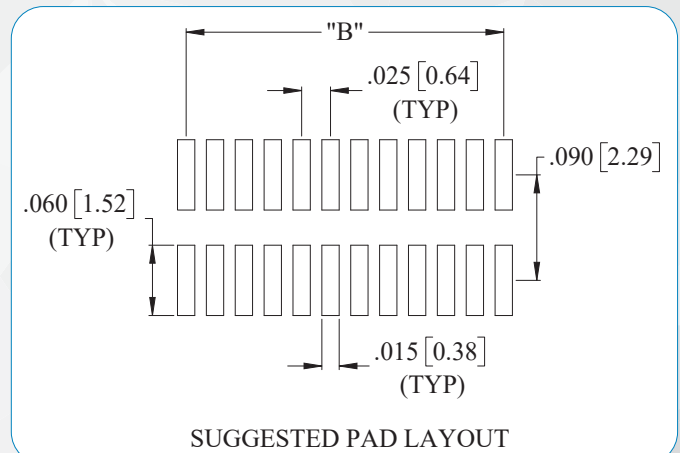
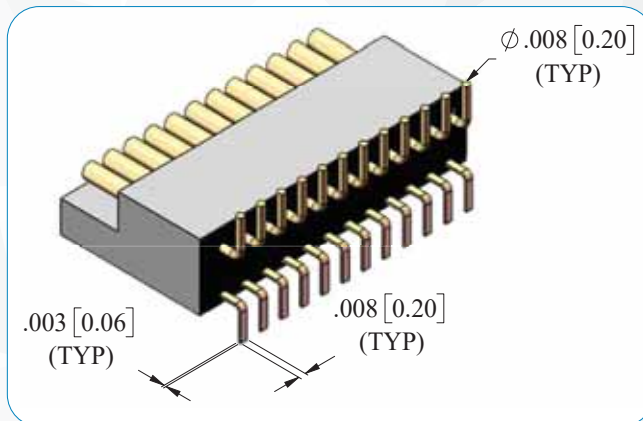
ELECTRO-MECHANICAL SPECS

Durability:	200 Cycles
Temperature:	-55°C to +125 °C (200 °C w/HTE)
Current rating:	1 AMP per contact
Voltage Rating (DWV):	250 VAC RMS Sea Level
Insulation Resistance:	5,000 Megohms min @ 100 VDC
Shock:	100 G's discontinuity < 10 nanoseconds
Vibration:	20 G's discontinuity < 10 nanoseconds
Thermal Vacuum Outgassing:	NASA SP-R-0022
Contact Resistance:	71 Milliohms max (71 mV max @ 1 AMP)
Mating/Unmating Force:	2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

Insulator:	Polyphenylene Sulfide per MIL-M-24519
Pin:	Gold Plated BeCu
Socket:	Gold Plated Copper Alloy
Encapsulant:	Epoxy

PZN-VV LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row	_____
Multiply the number of contact cavities minus 1 by .025"	_____
Add fixed end length constant	<u>.050"</u>
Total Length (Dimension A)	_____

Notes: Maximum length .325" [8.26].

Maximum number of contact cavities is 24

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

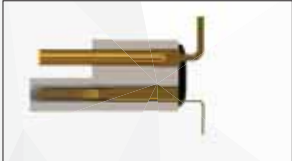
Multiply the number of contacts in one row minus 1 by .025"	_____
Total Length (Dimension B)	_____

Notes: Maximum length .275" [6.99].

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

Polarized Nano

VERTICAL SMT (TYPE VV) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	COMMON OPTIONS
PZN Polarized Nano Connector	04 - 24 (EVEN NUMBERS ONLY)	VV	HT HIGH TEMP
			RoHS RoHS COMPLIANT 

EXAMPLES:

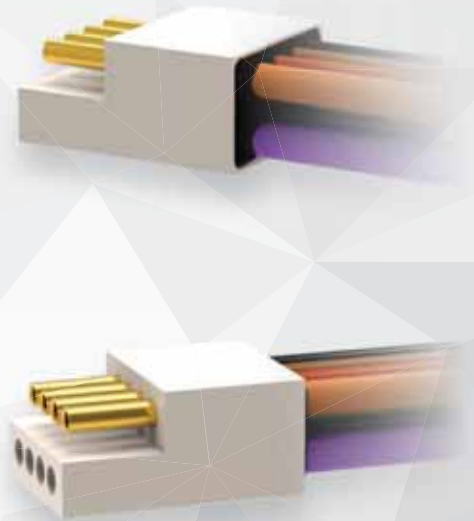


PZN-08-VV

PRE-WIRED/CABLE (TYPE WD/WC)

The Polarized Nano (PZN) connectors are designed to hold one row of pins and one row of sockets; this configuration polarizes the connector without the extra space needed for guide pins. The pre-wired PZN connector assemblies are crimped using proprietary semi-automated crimping systems. Due to their small size and precision required to make these quality crimps, hand crimping is not an option. Pre-crimped wires and contacts are potted in place further protecting the integrity of the crimp joint. Commercial Off The Shelf (COTS) versions are also available with 18" of color coded 30 AWG Teflon wire for quick turnaround.

The PZN connectors are available in standard sizes ranging from 4 through 24 positions and accept wires 30 AWG or smaller stranded wire.



ELECTRO-MECHANICAL SPECS

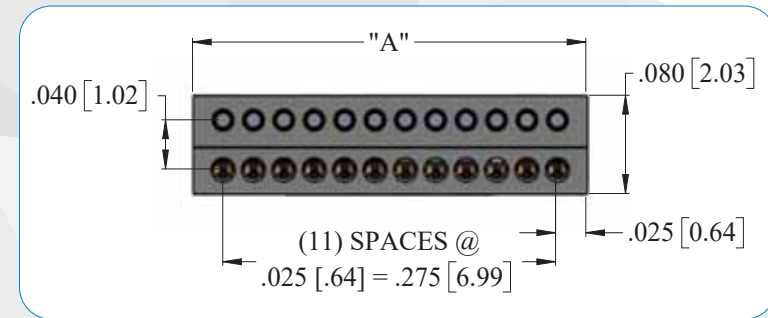
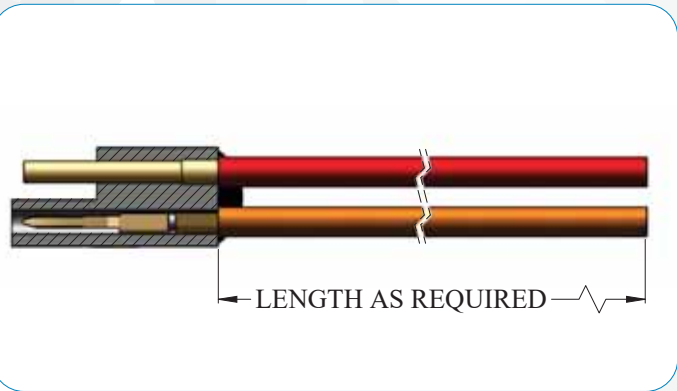
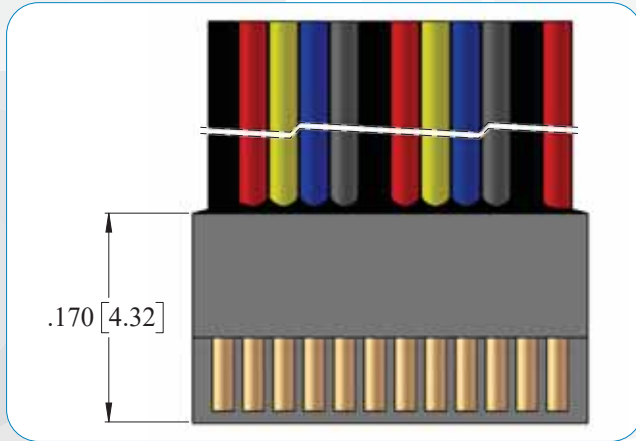
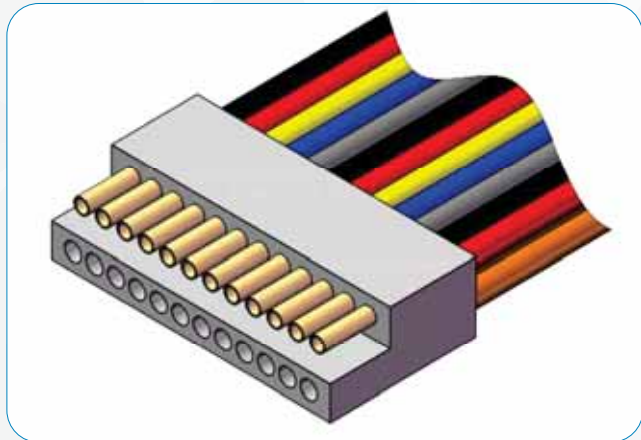
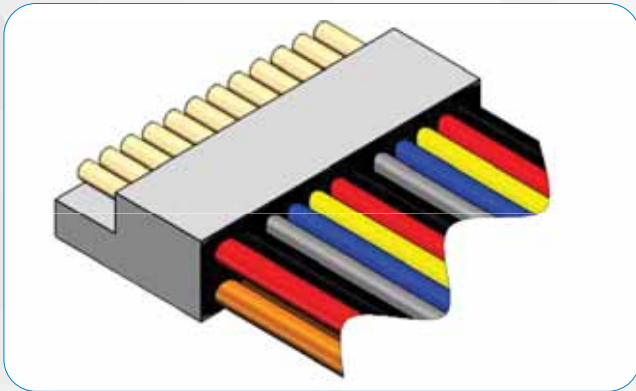
Durability:	200 Cycles
Temperature:	-55°C to +125 °C (200 °C w/HTE)
Current rating:	1 AMP per contact
Voltage Rating (DWV):	250 VAC RMS Sea Level
Insulation Resistance:	5,000 Megohms min @ 100 VDC
Shock:	100 G's discontinuity < 10 nanoseconds
Vibration:	20 G's discontinuity < 10 nanoseconds
Thermal Vacuum Outgassing:	NASA SP-R-0022
Contact Resistance:	71 Milliohms max (71 mV max @ 1 AMP)
Mating/Unmating Force:	2.5 oz (71 g) typical per contact

MATERIAL SPECIFICATIONS

Insulator:	Polyphenylene Sulfide per MIL-M-24519
Pin:	Gold Plated BeCu
Socket:	Gold Plated Copper Alloy
Encapsulant:	Epoxy

Polarized Nano

PZN-WD/WC LAYOUT



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row _____

Multiply the number of contact cavities minus 1 by .025" _____

Add fixed end length constant _____

Total Length (Dimension A) _____

Notes: Maximum length .325" [8.26].

Maximum number of contact cavities is 24

DIMENSIONS FOR "B"

To determine pad pattern layout length "B":

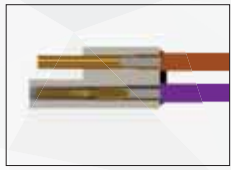
Multiply the number of contacts in one row minus 1 by .025" _____

Total Length (Dimension B) _____

Notes: Maximum length .275" [6.99].

Dimensions in [] are in Millimeters unless otherwise noted and are for reference only.

PRE-WIRED/CABLE (TYPE WD/WC) ORDERING GUIDE

SERIES	# OF CONTACTS	TERMINATION TYPE	WIRE LENGTH	COLOR CODED	COMMON OPTIONS
PZN POLARIZED NANO CONNECTOR 	04 - 24 (EVEN NUMBERS ONLY)	WD DISCRETE WIRES	18.00 =18.00" STANDARD	C 10 REPEATING COLORS PER MIL-STD 681 	HT HIGH TEMP
		TW TWISTED WIRES	XX.XX CUSTOM LENGTH i.e. 23.40 =23.40"		RoHS RoHS COMPLIANT 
		WC CABLE			
		WX MULTIPLE WIRE TYPES	WIRE GAUGE 30, 32 (STANDARD), 34 	Y ALL OTHER WIRE COLORS	CS CUSTOMER SUPPLIED MATERIAL

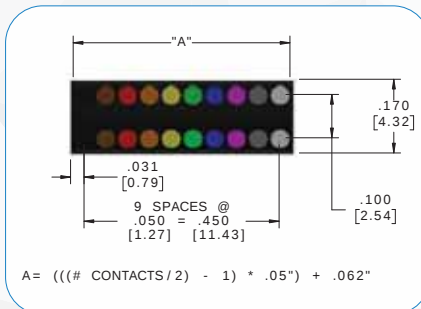
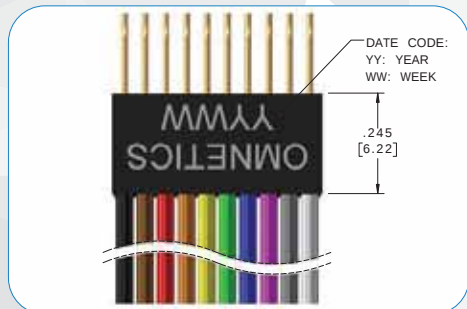
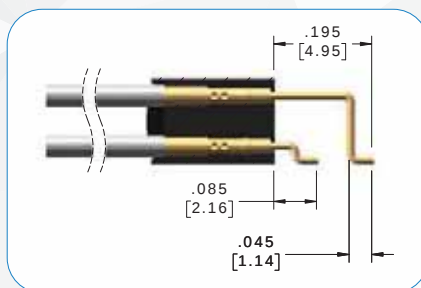
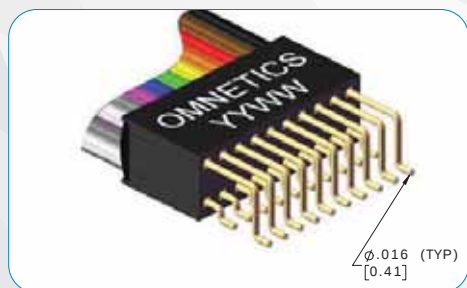
EXAMPLES:



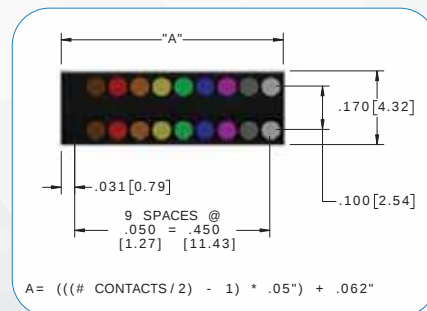
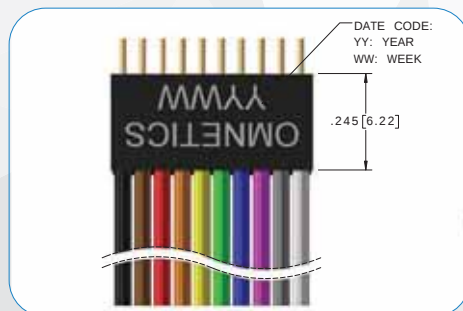
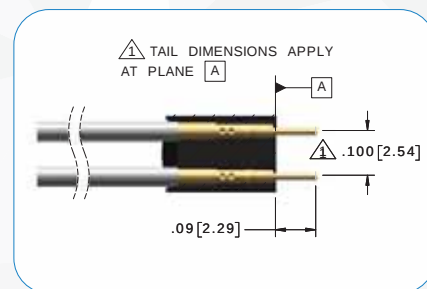
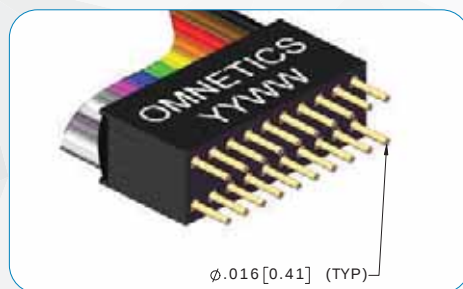
PZN-08-WD-18.00-C

Micro Strip - Headers

AA TAILS



DD TAILS



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Multiply the number of contact cavities minus 1 by .025"

Add fixed end length constant

Total Length (Dimension A)

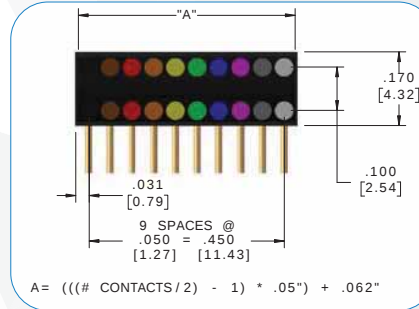
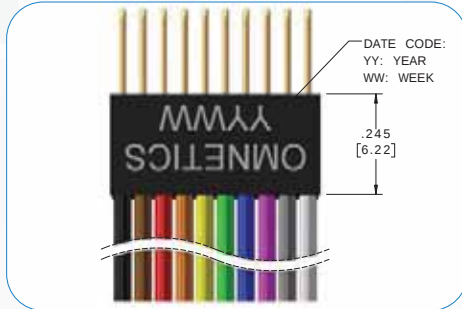
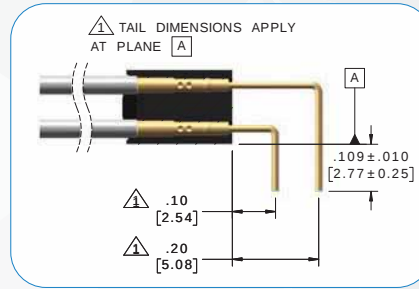
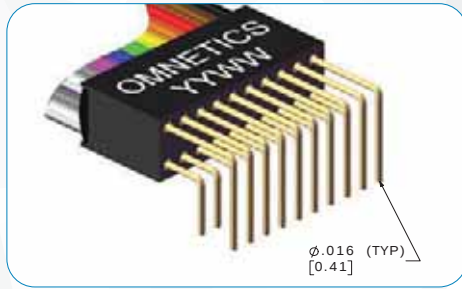
.050"

Notes: Maximum length .325" [8.26].

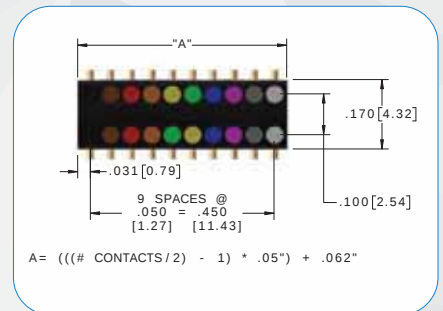
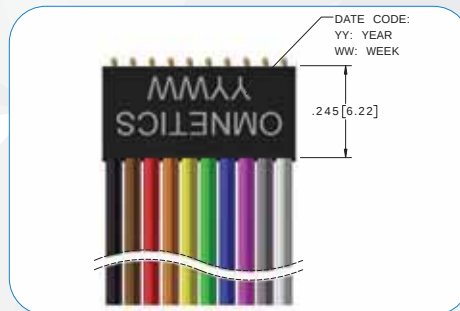
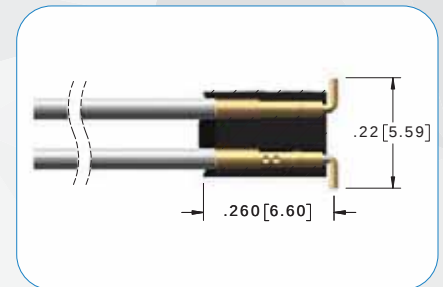
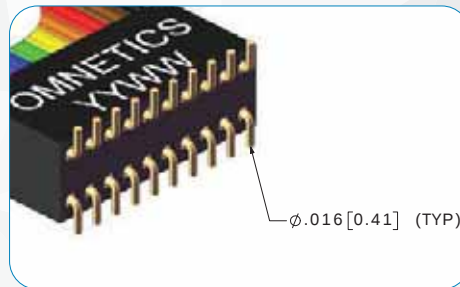
Maximum number of contact cavities is 24

Micro Strip - Headers

H2 TAILS



VV TAILS



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Multiply the number of contact cavities minus 1 by .025"

Add fixed end length constant

Total Length (Dimension A)

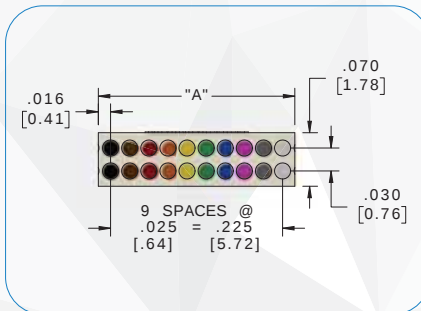
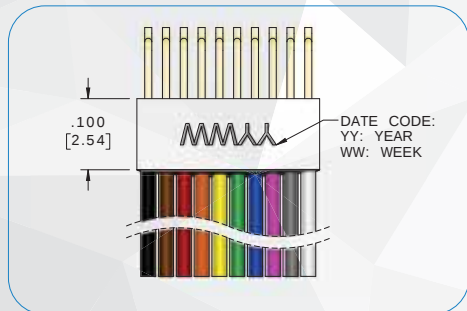
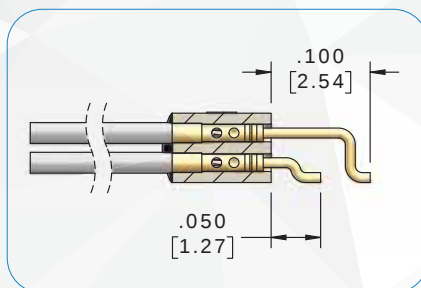
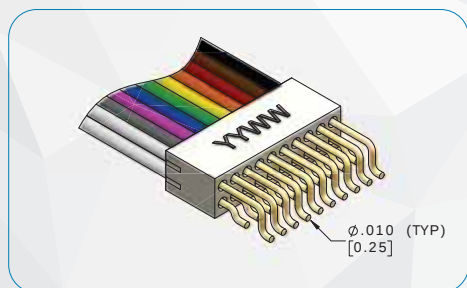
.050"

Notes: Maximum length .325" [8.26].

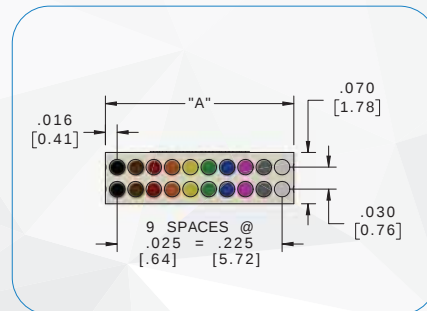
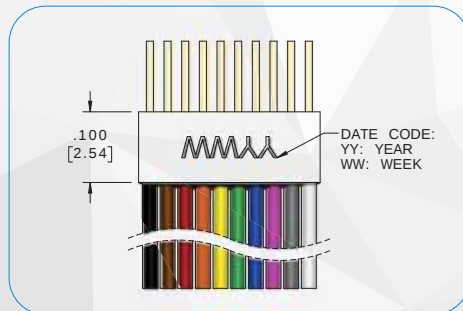
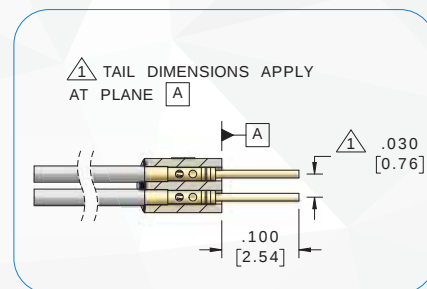
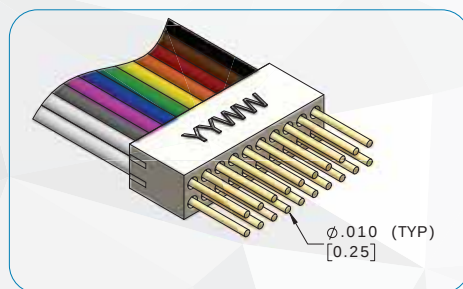
Maximum number of contact cavities is 24

Nano Strip - Headers

AH TAILS



DH TAILS



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Multiply the number of contact cavities minus 1 by .025"

Add fixed end length constant

Total Length (Dimension A)

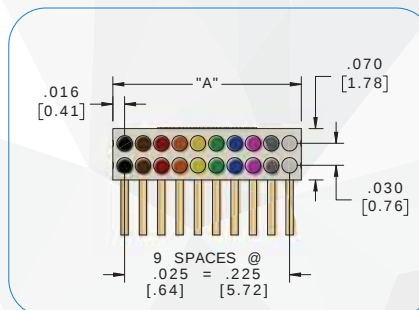
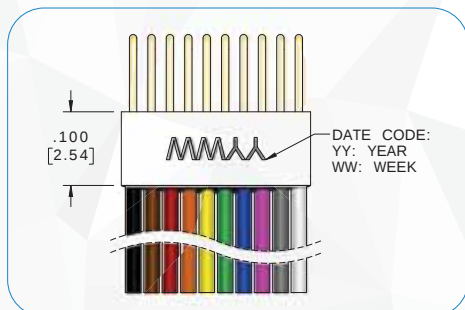
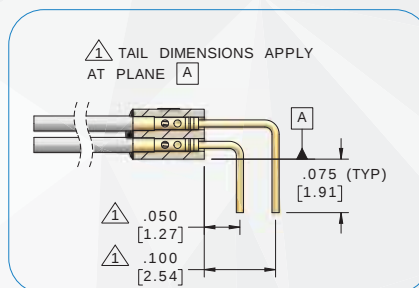
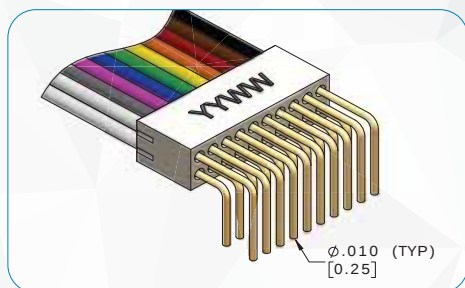
.050"

Notes: Maximum length .325" [8.26].

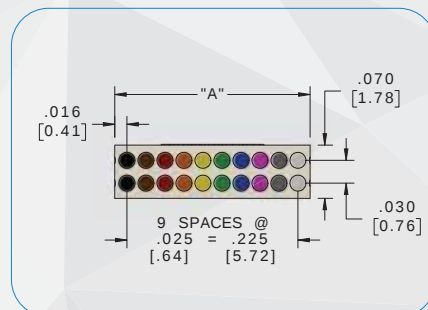
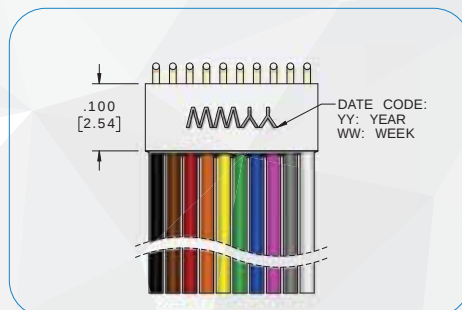
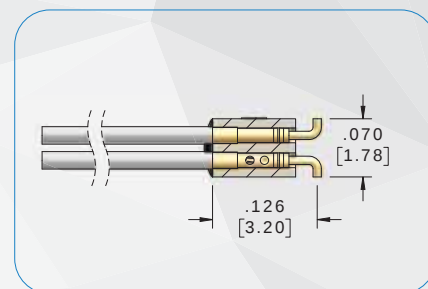
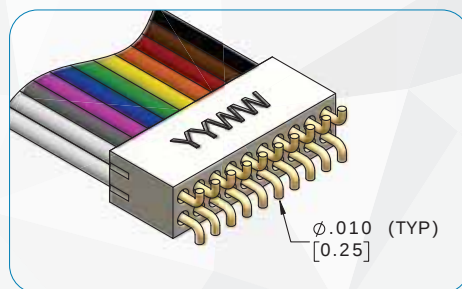
Maximum number of contact cavities is 24

Nano Strip - Headers

HH TAILS



VH TAILS



DIMENSIONS FOR "A"

To determine connector length "A":

Add the total number of contacts in one row

Multiply the number of contact cavities minus 1 by .025"

Add fixed end length constant

Total Length (Dimension A)

.050"

Notes: Maximum length .325" [8.26].

Maximum number of contact cavities is 24

Notes

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Hybrid Connectors



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S5104 – Micro and Nano Strip

Specifications subject to change without notice



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