

# Cat6a Ethernet Micro



## Electrical-Mechanical Specifications

- Operating Temperature: \_\_\_\_\_ -55°C to 85°C
- Dielectric Withstand Voltage: \_\_\_\_\_ 600 VAC RMS @sea level
- Contact Resistance: \_\_\_\_\_ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: \_\_\_\_\_ 3 Amps per contact
- Operating Temperature \_\_\_\_\_ -55°C to 85°C
- Durability: \_\_\_\_\_ 2000 Mating Cycles min
- Insulation Resistance: \_\_\_\_\_ 5000 megohms @ 500 VDC
- Shock: \_\_\_\_\_ 50 g's with no discontinuities > 1 microsecond
- Vibration: \_\_\_\_\_ 20 g's with no discontinuities > 1 microsecond
- Thermal Vacuum Outgassing (Space Class): \_\_\_\_\_ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: \_\_\_\_\_ 3 oz (85 g) per contact

## Material Specifications

- Contact: \_\_\_\_\_ Copper Alloy per MIL-DTL-83513
- Contact Finish: \_\_\_\_\_ Gold per ASTM B488, Type II, Class 1.27, Code C  
Over Nickel Underplate
- Insulator: \_\_\_\_\_ Thermoplastic per MIL-M-24519
- Overmold: \_\_\_\_\_ Black Thermoplastic Polyurethane
- Cable (Shielded): \_\_\_\_\_ 26 AWG (7-34) TPC, HDPE color coded, Black  
Polyurethane Jacket
- Shield: \_\_\_\_\_ Foamed Polypropylene wrap with braid - 38 AWG tin  
plated copper

## Shell Options

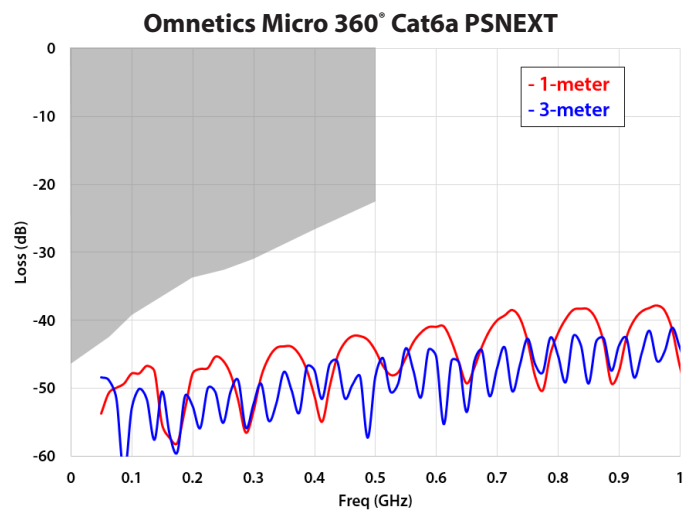
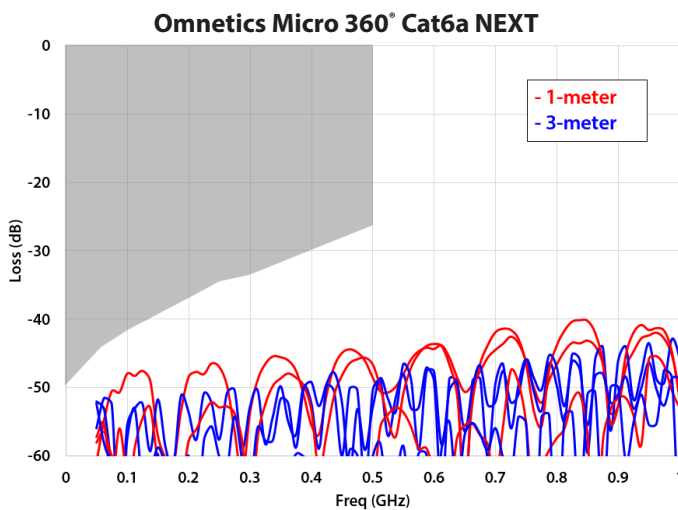
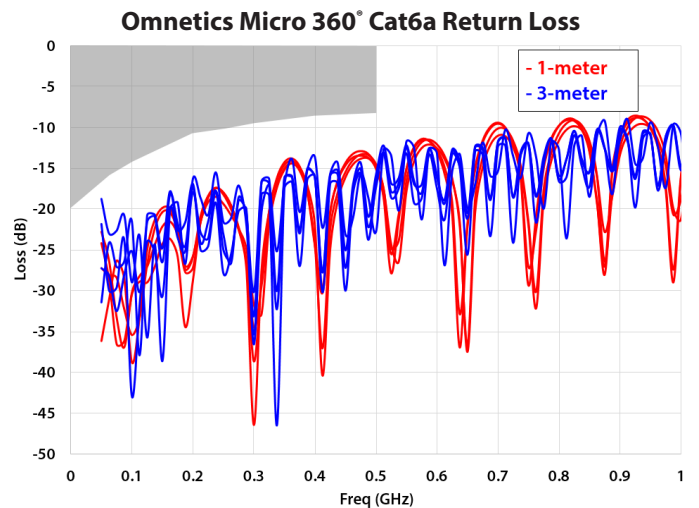
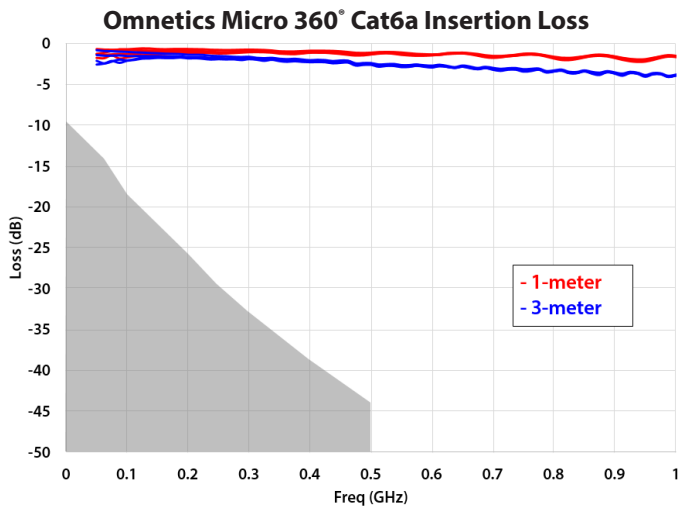
- Stainless Steel, 300 Series: \_\_\_\_\_ Passivated per SAE-AMS-2700  
Black Oxide Finish per MIL-DTL-13924, Class 4\*,  
Passivated per SAE-AMS-2700
- Brass Alloy 360 1/2 Hard: \_\_\_\_\_ Electroless Nickel per SAE-AMS-2404  
Black Nickel per MIL-P-18317
- Aluminum 6061: \_\_\_\_\_ Electroless Nickel per SAE-AMS-2404  
Black Nickel per MIL-P-18317

\* less resistance to salt spray test.

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## Electrical Specifications

Parameter		Spec	1-Meter	3-Meter
Differential Cable Impedance	$Z_{MIN}$	90 $\Omega$	97 $\Omega$	
	$Z_{MAX}$	110 $\Omega$	98 $\Omega$	
Differential Insertion Loss	Loss @ 500 MHz	< 44 dB	1 dB	3 dB
Differential Return Loss	Loss @ 500 MHz	< -8 dB	-13 dB	-14 dB
Differential Far-End Crosstalk	NEXT @ 500 MHz	< -27 dB	-48 dB	-53 dB
Differential Power Sum Far-End Crosstalk	PSNEXT @ 500 MHz	< -24 dB	-45 dB	-50 dB



Various cable options are available. Measurements shown above with cables manufactured in Asia.