



RJ45 CAT 5E AND 6A ETHERNET MIL-DTL-38999 Series III Type Connectors

Performance Specifications



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RJ45 CAT 5e Performance Specifications	
Property	MIL-DTL-38999 Series III Type

Material and Finish	
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	PC tails, solder cup, and crimp contacts: copper alloy, gold plated
RJ45 Insulator	PPS
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Sizes	17 and 19
Shielding Sleeve	Material: Copper alloy Finish: Nickel

Electrical Specifications	
Data Rate	CAT 5e = 10 BASE-T, 100 BASE-TX, and 1000 BASE-T/1000 BASE-TX
Current Rating	Cat 5e, 1.5 Amps
D.W.V.	1000 VDC (700 VAC)
I.R.	500 Mega ohms @ 500 VDC
Frequency	100 MHz, Cat 5e
Wiring	Straight through, Cat 5e
Cabling Length	Up to 100 meters or 100 meters max.
Shield Continuity	Continuous through coupler or continuous coupler to shell

Environmental/Mechanical Performance	
Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +120°C
Vibration	20g, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999, Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500

RJ45 CAT 6A Performance Specifications	
Property	MIL-DTL-38999 Series III Type

Material and Finish	
Shell/Coupling and Plating	Complete list of options available in the Material and Finish Options portion of this section
Contacts	crimp contacts: copper alloy, gold plated
RJ45 Insulator	PPS
Grommet, Peripheral Seal, Interfacial Seal, O-ring	Blended fluorosilicone/silicone elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-25988
Shell Sizes	17 and 19
Shielding Sleeve	Material: Copper alloy Finish: Nickel

Electrical Specifications	
Data Rate	CAT 6A = 10G BASE-T
Current Rating	Cat 6A, 1.5 Amps
D.W.V.	1000 VDC (700 VAC)
I.R.	500 Mega ohms @ 500 VDC
Frequency	500 MHz, Cat 6A
Wiring	Straight through, Cat 6A
Cabling Length	Up to 100 meters.
Shield Continuity	Continuous through coupler or continuous coupler to shell

Environmental/Mechanical Performance	
Sealing	IP68 mated condition, IP67 unmated condition
Outgassing	Mod Code 186S meets outgassing requirements per ASTM E 595 and meets NASA level 3 screening for standard reliability Mod Code 928 meets outgassing requirements per UL 94 V-0
Operating Temperature	-40°C to +120°C
Vibration	20g, 3 Axis, 10 - 2000Hz
Mechanical Shock	300 g's
Backshell Interface	MIL-DTL-38999, Designator H
Mating System	Triple-start stub ACME
Mating Cycles	500