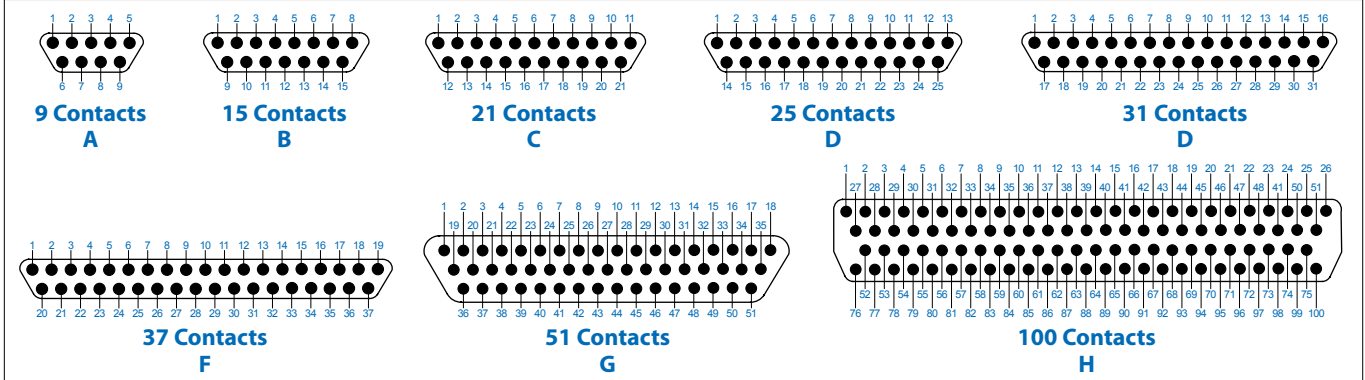


# MIL-DTL-83513 Micro-D Connectors



Micro-D  
MIL-DTL-83513

## MIL-DTL-83513 contact arrangements (face view pin connector)



## MIL-DTL-83513 Materials and Finishes (Specific to Glenair)

Connector Shell, Metal	Aluminum alloy 6061 in accordance with SAE-AMS-QQ-A-250/11 Plating Code C: Cadmium with yellow chromate conversion coating in accordance with SAE-AMS-QQ-P-416, Type II, Class 3 Plating Code N: Electroless nickel in accordance with SAE-AMS-26074, Class 3 Plating Code P: Stainless steel, 300 series, passivated in accordance with SAE-AMS-QQ-P-35 Plating Code A: Pure electrodeposited aluminum in accordance with MIL-DTL-83488, type II Plating Code K: Zinc nickel in accordance with ASTM B841 over a suitable underplate Plating Code T: Nickel fluorocarbon polymer, high phosphate nickel with fluorocarbon polymer additive over a suitable underplate
Connector Shell, Plastic	Liquid crystal polymer, 30% glass-filled or polyphenyl sulfide, 40% flass -filled, in accordance with MIL-M-24519
Insulator	Liquid crystal polymer, 30% glass-filled or polyphenyl sulfide, 40% flass -filled, in accordance with MIL-M-24519
Terminal Block, PCB	Liquid crystal polymer, 30% glass-filled or polyphenyl sulfide, 40% flass -filled, in accordance with MIL-M-24519
Interfacial Seal	Fluorosilicone rubber in accordance with A-A-59588
Pin Contact (TwistPin)	Beryllium copper, gold plated in accordance with ASTM B 488 Type II Class 1.27 (50 Microinches minimum) Code C, over nickel underplate in accordance with SAE-AMS-QQ-N-290, Class 2 (30 microinches minimum)
Socket Contact	Phos bronze in accordance with ASTM 139 gold plated in accordance with ASTM B 488 Type II Class 1.27 (50 Microinches minimum) Code C, over nickel underplate in accordance with SAE-AMS-QQ-N-290, Class 2 (30 microinches minimum)
Encapsulant (Potting)	Epoxy resin, hysol EE4215/HD3561
Jackscrews, Jackposts	Stainless steel, passivated in accordance with SAE-AMS-2700
Pigtail Wire, Insulated Hookup	MIL-W-22759/11: 19 strand silver-coated copper wire, extruded ptfe insulation, 600 volts rms, 200° C. MIL-W-22759/33: 19 strand high-strength silver-coated copper alloy wire, crosslinked modified ETFE insulation, 600 volts rms, 200° C.
Pigtail Wire, Uninsulated	Wire type 07 and 08: solid copper wire in accordance with A-A-59551, tin/lead plated wire type 05 and 06: solid copper wire in accordance with A-A-59551, gold-plated

## Mil-DTL-83513 Performance Specifications

Current Rating	3 AMP
Dielectric Withstanding Voltage	600 VAC Sea Level, 150 VAC 70,000 Feet
Insulation Resistance	5000 Megohms Minimum
Contact Resistance	8 Milliohms Maximum
Low Level Contact Resistance	32 Milliohms Maximum
Magnetic Permeability	2 μ Maximum
Operating Temperature	-55° C. to +125° C.
Shock	50 g.
Vibration	20 g.
Outgassing	Meets NASA Outgassing Requirements
Mating Force	(10 Ounces Maximum) X (# Of Contacts)
Salt Spray	48 Hours Aluminum Shell With Cadmium Plating
Durability	500 Mating Cycles Minimum