



MACHFORCE® CONNECTOR TESTING

The MACHFORCE family of connectors are rigorously tested for maximum durability and efficiency when you need it most. Designed for engineering professionals who demand the best, these high-speed connectors will give you security for your toughest projects. MACHFORCE connectors are tested and qualified for use with PICMATES® E6A6826, E6A6824 and E74826 Ethernet cables.

TEST PROCEDURE	TEST REQUIREMENT	OLIVE DRAB CADMIUM	NEW PLATING	NEW PLATING
			BLACK ZINC NICKEL	ELECTROLESS NICKEL
Ethernet Performance	EIA-568-C CAT6A Channel Test	✓	✓	✓
Shell-to-Shell Conductivity	MIL-DTL-38999 Rev N: 3.29	✓	*✓	✓
Braid-to-Shell Conductivity	MIL-DTL-38999 Rev N: 3.29.1	✓	*✓	✓
Salt Spray	MIL-DTL-38999 Rev N: 3.17	✓	✓	✓
Mechanical Shock	MIL-DTL-38999 Rev N: 3.28	✓	✓	✓
Random Vibration (MIL-DTL-38999 Rev N: 4.5.23, Series 2)	MIL-DTL-38999 Rev N: 3.27	✓	✓	✓
Durability	MIL-DTL-38999 Rev N: 3.12	✓	✓	✓
EMI Shielding Effectiveness	MIL-DTL-38999 Rev N: 3.32	**✓	**✓	**✓
Temperature Cycling	MIL-DTL-38999 Rev N: 3.8	✓	✓	✓
Coupling and Uncoupling Torque	MIL-DTL-38999 Rev N: 3.11	✓	✓	✓
Resistance to Indirect Lightning	MIL-DTL-38999 Rev N: 3.51	✓	✓	✓
Insulation Resistance at Ambient	MIL-DTL-38999 Rev N: 3.14.1	✓	✓	✓
Dielectric Withstand Voltage (600V)	MIL-DTL-38999 Rev N: 3.15	✓	✓	✓
Ingress Protection	IEC 60529: IP67	✓	✓	✓
Humidity	MIL-DTL-38999 Rev N: 3.30	✓	✓	✓
Functional Altitude Immersion (Functional Ethernet substituted for DWV/IR)	MIL-DTL-38999 Rev N: 3.13	✓	✓	✓
Pin Contact Stability	MIL-DTL-38999 Rev N: 3.35	✓	✓	✓
Contact Walkout	MIL-DTL-38999 Rev N: 3.36	✓	✓	✓
Fungus	MIL-DTL-38999 Rev N: 3.3.3	✓	✓	✓
Dust (Fine Sand)	MIL-DTL-38999 Rev N: 3.45	✓	✓	✓

* ELN (R) and CAD (W) platings pass D38999, Class III shell-to-shell conductivity to limits of 1.0mV and 2.5mV respectively. BZN (Z) plating passes D38999, Class III shell-to-shell conductivity to a limit of 100mV.

** Contact PIC to learn more