

M83513 Connectors

Aptiv's M83513 connectors are high-density, microminiature D-subminiature (Micro-D) connectors that pack world-class performance into the smallest footprint. Micro-D connectors with rugged D-shaped shell provide inherent polarization and EMI/RFI shielding and the twist-pin contact technology for reliable performance in the harshest environments. Aptiv's Micro-D connectors are a great choice for military, aerospace, medical and industrial electronics where space and weight savings are needed without sacrificing long-term durability and electrical performance.



KEY FEATURES & BENEFITS

- Ultra-compact rectangular form factor – up to 50% smaller and lighter than traditional Sub-D connectors.
- Drawn contact system – multi-point contact engagement ensures excellent vibration and shock resistance.
- Multiple shell materials – aluminum, stainless steel, titanium, or nickel-plated for weight or corrosion optimization.
- Variety of terminations – solder cup, wire pigtail, PCB tail, and flex-circuit mount options.
- Integrated jackscrew coupling – positive retention under vibration; optional quick-disconnect designs available.
- High contact density – up to 100 contacts in a shell less than 1.5" wide.
- Hermetic Sealing Options: Specialized versions for vacuum or pressure applications.

PRODUCT SPECIFICATIONS

Electrical Properties	
Current Rating	Up to 3A (per contact)
Voltage Rating	600 V rms (sea level)
Dielectric Withstanding Voltage (DWV)	1000 V rms (sea level)
Contact Resistance	8 mΩ

Environmental Properties	
Operating Temperature	-55 to +200°C
Thermal Shock	MIL-STD-202, Method 107
Humidity	MIL-STD-202, Method 103
Salt Spray / Corrosion	EIA 364-26 Condition B-48 hours at room temperature
Vibration	EIA-364-28 Condition IV, 1 microsecond max discontinuity at room temperature
Shock	EIA-364-27 Condition E, 1 microsecond max discontinuity at room temperature

PRODUCT SPECIFICATIONS CONTD.

Mechanical Properties	
Mating Cycles	500 cycles
Shell Material	Aluminum Alloy, Stainless Steel
Contact Material	Signal Pin Contacts - C17200 Beryllium Copper per ASTM B194 Signal Socket Contacts - C21000 Brass Alloy per ASTM B36
Insulator Material	Polyphenylene Sulfide (PPS) Per MIL-M-24519 GST-40F
Wire Sizes Accepted	24 AWG to 30 AWG
Contact Spacing	0.050" (1.27mm) centerline

M83513 CONNECTORS

M83513 Mil-Spec Hardware Part Number Definition

