

MRAC Connectors

Aptiv's MRAC (modular rack and panel) Connectors are rectangular, multi-contact, plug-in connectors for those rack and panel applications that require a compact, reliable and serviceable interconnect. Removable contacts are available that allow circuit modification as well as fast field servicing. EMI shielded, high density and ruggedized options are also available. The MRAC is used in industrial, aerospace, telecommunications and military applications that require high performance in space-constrained, highly reliable equipment.



KEY FEATURES & BENEFITS

- Removable Contacts – Enables easy insertion, extraction, and replacement
- High Density – Fits up to 104 contacts in a compact rectangular housing
- Rugged Construction – Withstands harsh conditions in critical environments
- Positive Polarization – Prevents mismating with gold-plated guides and keying
- Flexible Termination – Crimp, solder, and wire-wrap options support varied workflows
- EMI/RFI Shielding – Metal shell design protects against signal interference
- Ease of Assembly – Simplified wire termination reduces labor and rework
- Intermateable – Compatible with select industry-standard series for design flexibility

PRODUCT SPECIFICATIONS

Electrical Properties	
Current Rating	5A to 13A per contact
Voltage Rating	250 VAC to 2000 VAC
Insulation Resistance	5000 MΩ min
Dielectric Withstanding Voltage	1000 VAC to 2000 VAC
Contact Resistance	10 mΩ max
Operating Frequency	Up to 60 Hz (higher for some)

Environmental Properties	
Operating Temperature	Up to +125°C
Thermal Shock	MIL-STD-202, Method 107
Humidity	MIL-STD-202, Method 103
Salt Spray / Corrosion	MIL-STD-202, Method 101
Vibration	MIL-STD-202, Method 204
Shock	MIL-STD-202, Method 213
Fluid Resistance	Resistant to industrial/aerospace fluids

PRODUCT SPECIFICATIONS CONTD.

Mechanical Properties	
Mating Cycles	500 to 1000 cycles
Contact Retention (Axial)	High retention force
Wire Sizes Accepted	28 AWG to 14 AWG
Shell Material	Aluminum Alloy, Steel
Contact Material	Copper Alloy with Gold/Nickel
Insulator Material	Glass-filled Diallyl Phthalate
Number of Contacts	9 to 104 contacts
Polarization	Gold-plated guides, polarized shells