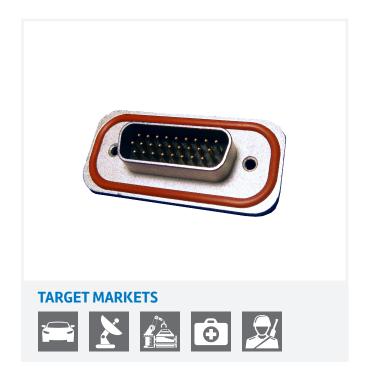


## **MDBR Ruggedized D-Sub Connectors**

# RUGGED D-SUB PANEL MOUNT CONNECTOR IP67 SEALING

Ruggedized D-sub connectors with die cast housings and IP67 sealing for Harsh Environment applications, provide reliable performance in extreme conditions for the most demanding applications, and mate with standard connectors.

- IP67 sealing protects against water, dust
- Die cast metal housings protect against mechanical damage
- Standard Density 9 pins to High Density 15 & 26 pins replace standard equivalents
- Operating temperature range from -44°C to +105°C for extreme conditions
- RoHS for environmental compliance



#### **FEATURES**

- Internal and external seals made with flexible silicone rubber
- Die Cast metal housing
- Mates with existing standard connectors
- In size to comparable standard equivalents
- Machined contacts plated with 30u" gold
- Wide variety of mounting and termination options

#### **BENEFITS**

- Excellent IP67 sealing over wide temperature range, protects equipment from water and dust incursion
- Mechanically rugged and stable protects against shock, vibration and impact and prevents distortion
- Can be used with wide variety of readily available mating connectors
- In many cases can replace existing standard parts with little to no changes or additional space required
- Extremely durable for demanding applications
- Replace virtually any existing standard connector using standard footprints and mounting hardware

#### TECHNICAL INFORMATION

#### **MATERIAL**

- External Shell: Die Cast Zinc, Nickel Plated
- Insulator Housing: High Temperature Resistant Nylon, Glass Reinforced, UL940V-0, Black
- Contacts: Machined Phosphor Bronze or Brass Alloy Plated with 0.76um (30u") min Gold over 1.27um (50u") min Nickel
- Gaskets & O-rings: Silicone Rubber, Black or Red
- Jack Sockets: Stainless Steel
- Dust Covers: Silicone Rubber, Grey, with Nickel Plated Brass Bushing
- Threaded Inserts: Nickel Plated Steel

#### **ELECTRICAL PERFORMANCE**

- Current Rating: Standard Density 5A max, High Density – 3A max
- Contact Resistance: 20mΩ max
- Insulation Resistance: 5000mΩ min
- Dielectric Withstanding Voltage: Standard Density-1500V DC, High Density-1200V DC

#### **MECHANICAL PERFORMANCE**

- Water & Dust Protection Level: Code IP67 per IEC 60529
- Operating Temperature: -40°C to +105°C
- Contact Insertion Force: Standard Density 5.0N (18ozf) max, 3.3N (12ozf) max Average Initial, High Density - 5.0N (18ozf) max, 2.6N (9.5ozf) max Average Initial
- Durability: Per EIA 364-09, 500 Mating Cycles
- Vibration: Per EIA 364–28 Condition V, Letter D,
  4.5 Hrs, No Discontinuity > 1us
- Shock: Per EIA 364–27 Test Condition A (11ms, 50g, 1/2 Sine), No Discontinuity > 1us

#### **SPECIFICATION**

 Amphenol Product Specification: MIL-DTL-24308

#### **APPROVALS AND CERTIFICATIONS**

RoHS

#### **ENVIRONMENTAL**

- Temperature Life w/o Load: Per EIA-364-17, 105°C, 1000 Hours
- Thermal Shock: Per EIA-364-32, -55°C to +105°C, 25 Cycles
- Humidity: Per EIA-364-31, 10 Cycles, 240 Hrs,
  25°C to 65°C, 90-95%RH, with -10°C Cold Shock
- Thermal Cycling: Per EIA-364-110, 500 Cycles, 15°C to 85°C
- Mixed Flowing Gas: Per EIA 364-65 Class IIA (Cl2, No2, H2S & SO2), 14 Day Exposure
- Isopropyl Alcohol & 5% Sodium Hydroxide Solution, 24 Hrs Each
- Solderability: Per EIA-364-52, 95% Coverage after Category 2 Steam Aging

#### **PACKAGING**

Tray

#### **TARGET MARKETS/APPLICATIONS**



Transportation



Datacom Telecom



Energy Industrial Rail



Medical



Military

## **► MDBR Ruggedized D-Sub Connectors**

### **PART NUMBER SELECTOR**

