

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **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**

