

MHDR Rugged HDMI Receptacles

RUGGED HDMI PANEL MOUNT CONNECTOR IP67 SEALING

Rugged HDMI receptacles 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
- Compact design saves panel space
- Operating temperature range from -55°C to $+105^{\circ}\text{C}$ for extreme conditions
- RoHS for environmental compliance



TARGET MARKETS



FEATURES

- Internal and external seals made with flexible silicone rubber
- Die Cast metal housing
- Improved thermal cycling performance
- Conductive Silicone Rubber Panel gasket
- Receptacles will mate with any standard type A HDMI plug
- Wide variety of mounting and termination options
- Electrical performance complies with HDMI specification 2.0

BENEFITS

- Excellent sealing to IP67 and higher over wide temperature range, protects equipment from water and dust incursion
- Mechanically rugged and stable protects against shock, vibration and impact and prevents distortion
- Suitable for outdoor application with wide operating temperature range
- Excellent EMI performance
- Can be used with wide variety of readily available mating connectors
- Replace virtually any existing standard connector using standard footprints and mounting hardware
- Supports 4K video up to 60 Frames per second

TECHNICAL INFORMATION

MATERIAL

- External Shell: Die Cast Zinc, Nickel Plated
- Housing Inserts: High Temperature Resistant LCP, Glass Reinforced, UL940V-0, Black
- Contacts: Copper Alloy Plated with 0.76um (30u") min Gold over 1.27um (50u") min Nickel on the Mating Area and 2.54um (100u") min Matte
- Internal Shield & Rear Shield: Tin over Nickel on the Contact Tails
- Panel Gasket: Stainless Steel, Passivated
- Internal O-ring: Conductive Silicone Rubber, Black Silicone Rubber, Beige

ELECTRICAL PERFORMANCE

- Current Rating: 0.5A max per Contact (delta T < 30°C)
- Contact Resistance: 10mΩ max, Initial
- Insulation Resistance: 1000mΩ min
- Dielectric Withstanding Voltage: 500 VAC rms (between adjacent contacts or contacts to ground)
- Differential Impedance: 100Ω ± 15%

MECHANICAL PERFORMANCE

- Water & Dust Protection Level: Code IP67 per IEC 60529
- Operating Temperature: -55°C to +105°C
- Insertion Force: Per EIA-364-13, 44.1N (4.5 kgf, 9.1lbf) max
- Withdrawal Force: Per EIA-364-13, 9.8N (1.0 kgf, 2.2lbf) to 39.2N (4.0 kgf, 8.8lbf)
- Durability: Per EIA 364-09, 10 000 Mating Cycles
- Vibration: Per EIA 364-28 Condition III (15g, 10-2000Hz, 12 Hrs), No Discontinuity > 1us
- Shock: Per EIA 364-27 Test Condition A (11 ms, 50g, 1/2 Sine), No Discontinuity > 1us

SPECIFICATION

- Amphenol Product Specification: HDMI Rev 1.4

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 +125°C, 10 Cycles
- Humidity: Per EIA 364-31, 10 Cycles, 240 Hrs, 25°C to 65°C 90-95%RH, with -10°C Cold Shock
- Mixed Flowing Gas: Per EIA 364-65 Class IIA (Cl2, NO2, H2S & SO2), 14 Day Exposure
- Solvent Resistance: 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



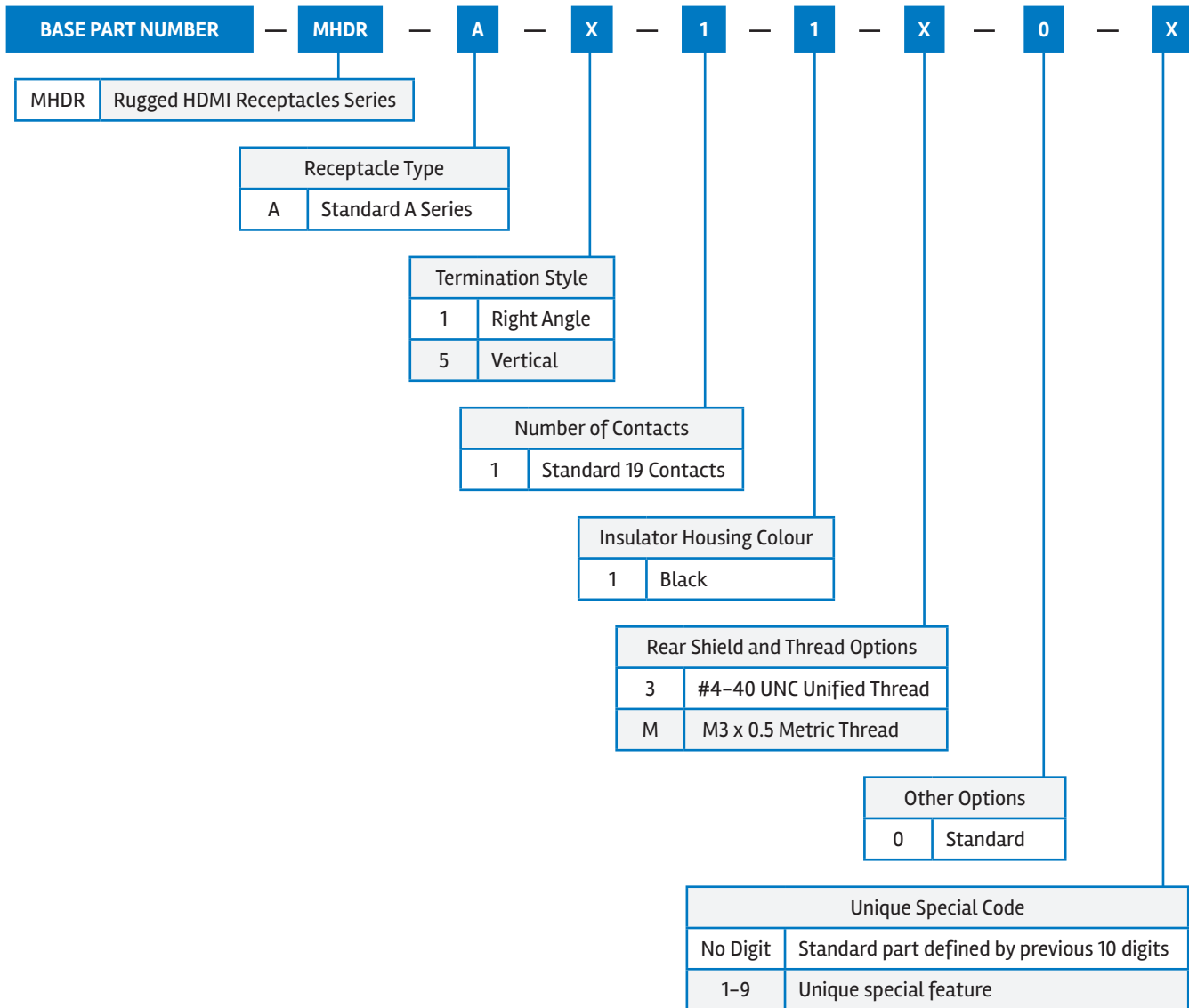
Military

Disclaimer

Please note that the above information is subject to change without notice.

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PART NUMBER SELECTOR



CM10MHDR07TEA4