

MDB Rugged D-sub Connector

Product Specification S6016C Rev 0.2

Amphenol

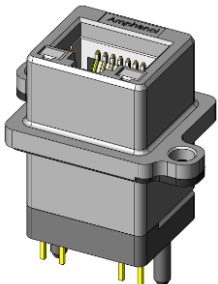
Now you're connected!

About Amphenol Commercial Products

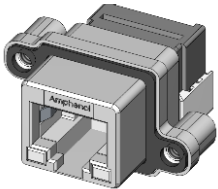
Amphenol's commercial connector products are used in a variety of end user applications including networking, telecom, server & computer, storage & HDD, consumer electronics and entertainment, professional audio & Industrial & Military/Aerospace.

Related Products

MRJ



MRJ-5480-01 SHOWN VERTICAL, PCB TAIL, 8 POSITION RJ45

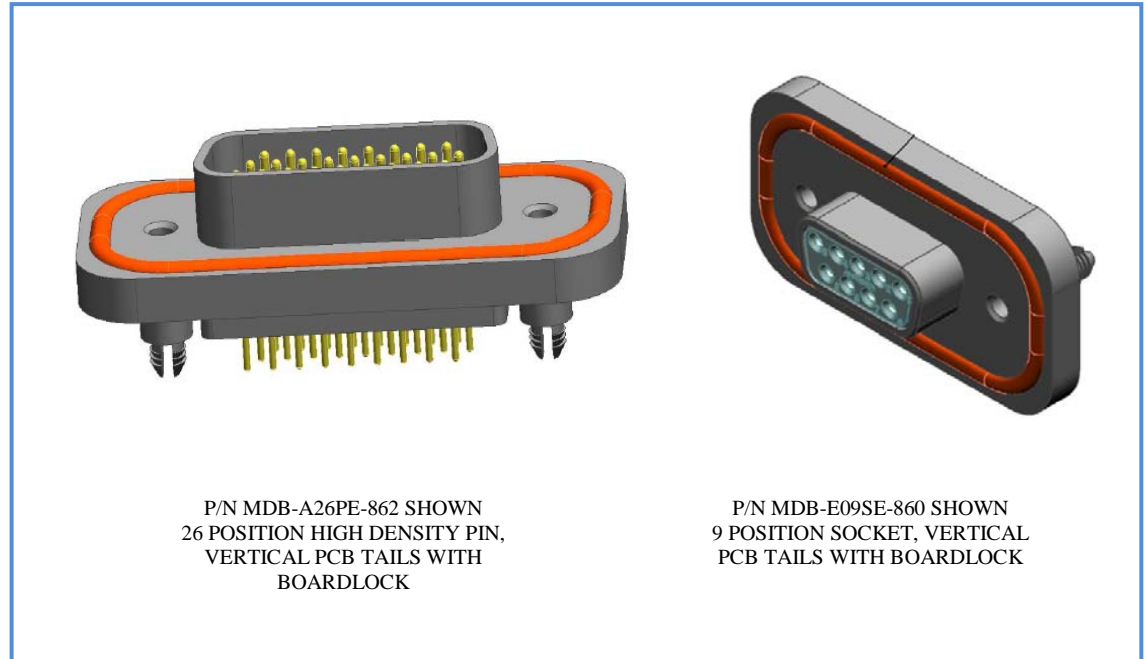


MRJ-5380-01 SHOWN RIGHT ANGLE, PCB TAIL, 8 POSITION RJ45

MUSB



MUSB-C111-30 SHOWN SERIES A, RIGHT ANGLE, STACKED



P/N MDB-A26PE-862 SHOWN 26 POSITION HIGH DENSITY PIN, VERTICAL PCB TAILS WITH BOARDLOCK

P/N MDB-E09SE-860 SHOWN 9 POSITION SOCKET, VERTICAL PCB TAILS WITH BOARDLOCK

Overview

This Product Specification defines the general use and performance parameters for Amphenol's MDB (860) series of Rugged D-sub connectors.

Availability: 9 position standard density pin and socket connectors available, 26 position high density pin and socket connectors available. Termination options include vertical PCB tails for 26 and 9 position connectors in addition to right angle PCB tails and solder cups suitable for up to 20 AWG for the 9 position connectors.

Usage

The connector system is designed to provide a standard D-sub interface for enclosures exposed to harsh environments. Protection is provided for IP67 applications per IEC 60529 specification. Protection is provided for the ingress of water when immersed to a 1.0m depth for a period of 30 minutes and the ingress of dust less than 75 microns under 2 kPa vacuum pressure. A sturdy die cast shell provides excellent strength and durability in the most demanding applications while a high temperature resistant plastic housing captures high quality gold plated screw machined copper alloy contacts.

Applications

Intended for use in applications such as:

- Outdoor equipment
- Portable devices
- Automation equipment
- Industrial and agricultural equipment

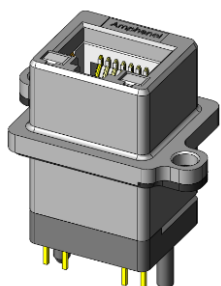
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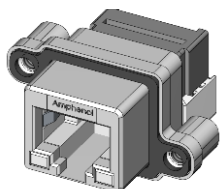
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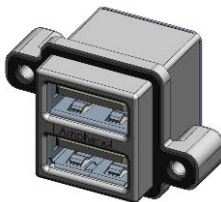


MRJ-5480-01 SHOWN VERTICAL, PCB TAIL, 8 POSITION RJ45



MRJ-5380-01 SHOWN RIGHT ANGLE, PCB TAIL, 8 POSITION RJ45

MUSB



MUSB-C111-30 SHOWN SERIES A, RIGHT ANGLE, STACKED

Connector Electrical Characteristics

Maximum current: 5A per contact
 Temperature rise: Meets the UL requirement of 30° C ΔT
 Maximum voltage: 200V DC or 125V AC per contact
 Contact resistance: 15 mΩ max
 Insulation Resistance: 5 GΩ at 200V DC for 60 seconds
 DWV: 500V minimum DC for 60 seconds

Connector Mechanical Characteristics

9 or 26 position D-sub interface
 Durability: 500 mating cycles
 Connector sealing provides resistance to 5 PSI after high temperature soldering exposure.

Material Requirements

MDB connectors are RoHS compliant.
 Unless otherwise specified, the materials for each component shall be:

- Contacts
 - Base material – Copper alloy
 - Plating
 - 30 μ" (0.76 μm) min Gold over 50 μ" (1.27 μm) min Nickel
- Housings: Black color, glass-reinforced, lead-free solder reflow process compatible thermoplastic, UL94V-0 rated
- Shell: Die cast Zinc alloy
 - Plating – 50 μ" (1.27 μm) min Nickel
- Gasket: Silicone rubber

Temperature rise: Meets the requirement of 30° C ΔT
 Operating temperature -40° to +105° C
 Storage temperature -40° to +105° C

Process Characteristics

Connectors are RoHS compliant and can resist lead free wave soldering processes. The rear seal withstands a 150°C preheat for 180 seconds prior to exposure to 265°C wave solder for 8 seconds. Parts comply to IP67 requirements after exposure.

Available Documents

Drawing Numbers:

P-MDB-A26PE-862	MDB Rugged D-Sub Connector, 26 Size High Density Pin, Vert PCB Tail, Boardlock
P-MDB-A26SE-861	MDB Rugged D-Sub Connector, 26 Size High Density Skt, Vert PCB Tail, Boardlock
P-MDB-E09PM-860	MDB Rugged D-Sub Connector, 9 Size Pin, Solder Cup Termination
P-MDB-E09SM-860	MDB Rugged D-Sub Connector, 9 Size Socket, Solder Cup Termination
P-MDB-E09SA-700	MDB Rugged D-Sub Connector, 9 Size Socket, Right Angle PCB tail, Boardlock
P-MDB-E09PE-760	MDB Rugged D-Sub Connector, 9 Size Pin, Vertical mount, Dust cover
P-MDB-E09PE-860	MDB Rugged D-Sub Connector, 9 Size Pin, Vert PCB Tail, Boardlock
P-MDB-E09PE-765	MDB Rugged D-Sub Connector, 9 Size Pin, Vertical mount
P-MDB-E09SE-860	MDB Rugged D-Sub Connector, 9 Size Socket, Vert PCB Tail, Boardlock
P-MDB-E09SE-760	MDB Rugged D-Sub Connector, 9 Size Socket, Vertical mount, Dust cover
P-MDB-E09SE-765	MDB Rugged D-Sub Connector, 9 Size Socket, Vertical mount