MUSBR-M Rugged USB Type C

Product Specification S6109C Rev 1.0

Amphenol

Now you're connected!



Overview

This Product Specification defines the general use and performance parameters for Amphenol's MUSBR series of connectors.

Availability: Right angle and Vertical PCB tail versions are available. This is also available on an interposer card with any connector type defined by the customer on the opposite side. Protective dust covers are also planned.

Usage

These connectors are unique as they allow for upside –up or upside down mating in a very small profile. These receptacles will engage with the plugs regardless of how the plug is inserted. They also provide a multi function, single cable solution for USB, Power and Audio Video. They are small enough for mobile phones and robust enough for laptops and tablets.

Applications

Intended for use in applications such as:

- Laptops and Tablets
- Outdoor Audio Video Equipment
- Digital Cameras/Camcorders
- Mobile Phones
- Game Controllers
- Any Device that Currently uses a USB

With Terminal Block

With PCB for wiring

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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

MDBR



9 POSITION CONNECTOR SHOWN

MUSBK



MUSB-K152-30 SERIES MICRO-AB RIGHT ANGLE PCB TAIL.





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

Connector Electrical Characteristics

Parameter	Series C
Current rating:	1.25A per contact
Contact resistance:	$40 \text{ m}\Omega \text{ max}$
Insulation resistance:	$100 \text{ M}\Omega \text{ min}$
DWV:	100 VAC
Differential Impedance:	$90\Omega~\pm15\Omega$

Connector Mechanical Characteristics

Thermal Shock:	5 cycles @ -40° to $+125^{\circ}$ C
Physical Shock:	30g's ¹ / ₂ Sine for 11ms
Humidity:	EIA-364-31 Condition C, method III
Vibration:	EIA-364-28 Condition V, letter A
Salt spray:	EIA-364-26 for 250 hrs

Process Characteristics

Recommended soldering process: Hand or wave solder peaked at 260°C for 8 seconds max Recommended Torque for #4-40 or M3 Panel Mount Screws: 0.45 to 0.65 Nm (4-5.75 in-lbs) Recommended Torque for #2-56 or M2.5 Panel Mount Screws: 0.23 to 0.34 Nm (2 -3 in-lbs)

Mating Cycles: 10,000

Material Requirements

MUSBR-M connectors are RoHS compliant.

Unless otherwise specified, the materials for each component shall be:

- Contacts: Copper Alloy, 30µ" (0.76µm) min Gold over 50µ" (1.27µm) min Nickel on Mating Area with Matte Tin over Nickel on the Tails
- Housing: Engineering thermoplastic, UL94V-0 rated, Black.
- Shell: Die cast zinc alloy with nickel plating
- Rear Cover: Stainless Steel, Matte Tin over Nickel Plating
- Gasket: Conductive Silicone Rubber, Black

Operating temperature -40° to $+105^{\circ}$ C

Available Documents

Drawing Numbers: P-MUSBR-M1C1-X0 P-MUSBR-M5C1-X0

MUSBR rugged Series C, Right Angle, PCB Mount MUSBR rugged Series C, USB 3.1, Vertical PCB Mount

3D Models:

M-MUSBR-M1C1-X0 M-MUSBR-M5C1-X0 MUSBR rugged Series C, Right Angle, PCB Mount MUSBR rugged Series C, USB 3.1, Vertical PCB Mount

Contact factory, authorized Amphenol representative or website www.amphenolcanada.com for additional configurations

Quality Test Reports Pending

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