

SMA Male to TNC Female Bulkhead Cable FM-SR141TBJ Coax in 12 Inch

The SMA male to TNC female bulkhead 12 inch cable using FM-SR141TBJ coax, part number FMCA2143-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a male to female gender configuration with 50 ohm formable FM-SR141TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA2143-12 SMA male to TNC female cable assembly operates to 6 GHz. Our RF cable assembly with TNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

| Description | Min | Typ | Max | Units |
|-------------------------|-----|-------------|-------|--------------|
| Frequency Range | DC | | 6 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 70 | | % |
| RF Shielding | 100 | | | dB |
| Group Delay | | 1.43 [4.69] | | ns/ft [ns/m] |
| Capacitance | | 29 [95.14] | | pF/ft [pF/m] |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|-------|-------|-------|-------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 6 | GHz |
| Insertion Loss (Typ.) | 0.256 | 0.282 | 0.324 | 0.398 | 0.552 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length* | 12 in [304.8 mm] |
| Diameter | 0.69 in [17.53 mm] |

Cable

| | |
|--------------------------------------|---------------------------|
| Cable Type | FM-SR141TBJ |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |



Configuration:

- SMA Male
- TNC Female Bulkhead
- FM-SR141TBJ

Features:

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 70% Phase Velocity
- FEP Jacket
- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- Cable may be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- High RF Shielding >100 dB
- 100% Hi-pot and continuity tested
- 100% VSWR tested to max frequency of assembly
- Standard and custom lengths ship the same day

Applications:

- General Purpose
- Laboratory Use

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| | |
|--------------------------------------|-------------------------------|
| Outer Conductor Material and Plating | Tinned Copper Composite Braid |
| Jacket Material | FEP, Black |
| Jacket Diameter | 0.161 in [4.09 mm] |
| One Time Minimum Bend Radius | 0.315 in [8 mm] |
| Repeated Minimum Bend Radius | 1.575 in [40.01 mm] |

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------|----------------------------|------------------------------------|
| Type | SMA Male | TNC Female |
| Mount Method | | Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | | Beryllium Copper, Gold over Nickel |
| Dielectric Type | | PTFE |
| Body Material & Plating | Brass, Gold over Nickel | Brass, Nickel |
| Coupling Nut Material & Plating | Passivated Stainless Steel | |
| Hex Size | 5/16 inch | |
| Torque | 8 in-lbs 0.9 Nm | |

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8"$, whichever is greater.

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMCA2143 - xx uu

cm = Centimeters
 <blank> = Inches

Length

Example: FMCA2143-12 = 12 inches long cable
 FMCA2143-100cm = 100 cm long cable

SMA Male to TNC Female Bulkhead Cable FM-SR141TBJ Coax in 12 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [SMA Male to TNC Female Bulkhead Cable FM-SR141TBJ Coax in 12 Inch FMCA2143-12](#)

URL: <https://www.fairviewmicrowave.com/sma-male-tnc-female-cable-fm-sr141tbj-coax-fmca2143-12-p.aspx>

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