

FMCA2125-48 DATA SHEET

SMA Male to RA SMA Male Cable FM-SR141TBJ Coax in 48 Inch

The SMA male to RA SMA male 48 inch cable using FM-SR141TBJ coax, part number FMCA2125-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male 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 FMCA2125-48 SMA male to SMA male cable assembly operates to 10 GHz. The right angle SMA interface on the FM-SR141TBJ cable allows for easier connections in tight spaces.

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 | Т | ур | Max | ι | Inits |
|-------------------------|-----|------|--------|-------|-------|----------|
| Frequency Range | DC | | | 10 | | GHz |
| VSWR | | | | 1.4:1 | | |
| Velocity of Propagation | | - | 70 | | | % |
| RF Shielding | 100 | | | | | dB |
| Group Delay | | 1.43 | [4.69] | | ns/f | t [ns/m] |
| Capacitance | | 29 [| 95.14] | | pF/fl | t [pF/m] |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|-----|------|------|------|-------|
| Frequency | 0.5 | 1 | 2.5 | 5 | 10 | GHz |
| Insertion Loss (Typ.) | 0.63 | 0.8 | 1.09 | 1.58 | 2.23 | dB |

Electrical Specification Notes:

The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

Mechanical Specifications

Cable Assembly

Length* 48 in [121.92 cm]
Diameter 0.315 in [8 mm]

Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Outer Conductor Material and Plating
Jacket Material
Jacket Diameter

FM-SR141TBJ 50 Ohms Solid Copper Clad Steel, Silver PTFE Tinned Copper Composite I

Tinned Copper Composite Braid FEP, Black 0.161 in [4.09 mm]



Configuration:

- SMA Male
- SMA Male Right Angle
- FM-SR141TBJ

Features:

- Max Frequency 10 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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One Time Minimum Bend Radius Repeated Minimum Bend Radius 0.315 in [8 mm] 1.575 in [40.01 mm]

Connectors

| Description | Connector 1 | | | Connector 2 | | | |
|---------------------------------|-------------|----------------------------|-----------|-------------|----------------------------|----|--|
| Туре | SMA Male | | | SMA Male | | | |
| Impedance | 50 Ohms | | | | 50 Ohms | | |
| Contact Material & Plating | | | | | Brass, Gold | | |
| Dielectric Type | | | | | PTFE | | |
| Body Material & Plating | | Brass, Gol | iss, Gold | | Brass, Gold | d | |
| Coupling Nut Material & Plating | | Passivated Stainless Steel | | | Passivated Stainless Steel | | |
| Hex Size | | 5/16 in. | | | 5/16 in. | | |
| Torque | | 8 in-lbs 0.9 | Nm | | 8 in-lbs 0.9 | Nm | |
| | | | | | | | |

Mechanical Specification Notes:

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:

FMCA2125 - xx uu

cm = Centimeters

chlank> = Inches

Length

Example: FMCA2125-12 = 12 inches long cable
 FMCA2125-100cm = 100 cm long cable

SMA Male to RA SMA Male Cable FM-SR141TBJ Coax in 48 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 RA SMA Male Cable FM-SR141TBJ Coax in 48 Inch FMCA2125-48

URL: https://www.fairviewmicrowave.com/sma-male-ra-sma-male-cable-fm-sr141tbj-coax-fmca2125-48-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

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^{*}All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





