

# FMCA2128-6 DATA SHEET

## RA SMA Male to SMA Female Bulkhead Cable FM-SR141TBJ Coax in 6 Inch with LF Solder

The RA SMA male to SMA female bulkhead 6 inch cable using FM-SR141TBJ coax, part number FMCA2128-6, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA 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 semirigid assemblies since they are hand formable. The FMCA2128-6 SMA male to SMA female cable assembly operates to 10 GHz. The right angle SMA interface on the FM-SR141TBJ cable allows for easier connections in tight spaces. Our RF cable assembly with SMA 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 | Т     | ур     | Max   | ι    | Jnits    |
|-------------------------|-----|-------|--------|-------|------|----------|
| Frequency Range         | DC  |       |        | 10    |      | GHz      |
| VSWR                    |     |       |        | 1.4:1 |      |          |
| Velocity of Propagation |     | 7     | 70     |       |      | %        |
| RF Shielding            | 100 |       |        |       |      | dB       |
| Group Delay             |     | 1.43  | [4.69] |       | ns/f | t [ns/m] |
| Capacitance             |     | 29 [9 | 95.14] |       | pF/f | 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.) | 0.341 | 0.362 | 0.399 | 0.46 | 0.54 | 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\* 6 in [152.4 mm]
Diameter 0.433 in [11 mm]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type

FM-SR141TBJ 50 Ohms Solid

Copper Clad Steel, Silver PTFF



## **Configuration:**

- SMA Male Right Angle
- SMA Female Bulkhead
- 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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Outer Conductor Material and Plating

Jacket Material

Jacket Diameter

Tinned Copper Composite Braid

FEP, Black

0.161 in [4.09 mm]

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 Female             |  |  |
| Mount Method   |                 | Bulkhead               |  |  |
| Impedance  | 50 Ohms         | 50 Ohms                |  |  |
| Contact Material & Plating                                 | Brass, Gold     | Beryllium Copper, Gold |  |  |
| Dielectric Type  | PTFE            | PTFE                   |  |  |
| Body Material & Plating                                    | Brass, Gold     | Brass, Gold            |  |  |
| Coupling Nut Material & Plating Passivated Stainless Steel |                 |                        |  |  |
| Hex Size   | 5/16 in.        |                        |  |  |
| Torque   | 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.



Part Number Configuration:

FMCA2128 - xx uu | cm = Centimeters | cblank> = Inches | Length

Example: FMCA2128-12 = 12 inches long cable

FMCA2128-100cm = 100 cm long cable

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





RA SMA Male to SMA Female Bulkhead Cable FM-SR141TBJ Coax in 6 Inch with LF Solder 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: RA SMA Male to SMA Female Bulkhead Cable FM-SR141TBJ Coax in 6 Inch with LF Solder FMCA2128-6

URL: https://www.fairviewmicrowave.com/ra-sma-male-sma-female-cable-fm-sr141tbj-coax-fmca2128-6-p.aspx







