

## RA SMA Male to TNC Female Bulkhead Cable FM-SR086TBJ Coax in 12 Inch

The RA SMA male to TNC female bulkhead 12 inch cable using FM-SR086TBJ coax, part number FMCA2142-12, 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-SR086TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA2142-12 SMA male to TNC female cable assembly operates to 6 GHz. The right angle SMA interface on the FM-SR086TBJ cable allows for easier connections in tight spaces. 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		69.5		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		10.2 [33.46]		$\Omega$ /1000ft [ $\Omega$ /Km]

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.379	0.45	0.524	0.646	0.901	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\* 12 in [304.8 mm]  
 Diameter 0.69 in [17.53 mm]

#### Cable

Cable Type FM-SR086TBJ  
 Impedance 50 Ohms



### Configuration:

- SMA Male Right Angle
- TNC Female Bulkhead
- FM-SR086TBJ

### Features:

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 69.5% 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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Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Outer Conductor Material and Plating	Tinned Copper Composite Braid
Jacket Material	FEP, Black
Jacket Diameter	0.105 in [2.67 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	0.787 in [19.99 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	TNC Female
Mount Method		Bulkhead
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold over Nickel Beryllium Copper, Gold over Nickel	
Contact Plating Spec.	0.2 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold over Nickel	Brass, Nickel
Body Plating Spec.	0.1 µin minimum	
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 ± 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:

**FMCA2142 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMCA2142-12 = 12 inches long cable  
 FMCA2142-100cm = 100 cm long cable

RA SMA Male to TNC Female Bulkhead Cable FM-SR086TBJ 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: [RA SMA Male to TNC Female Bulkhead Cable FM-SR086TBJ Coax in 12 Inch FMCA2142-12](#)

URL: <https://www.fairviewmicrowave.com/ra-sma-male-tnc-female-cable-fm-sr086tj-coax-fmca2142-12-p.aspx>

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