

# 

#### FMCA3242-12

#### Configuration

Connector 1: 2.92mm Male
Connector 2: 2.92mm Male
Cable Type: FM-SR086TBJ
Coax Flex Type: Formable

#### **Features**

- Max Frequency 20 GHz
- Shielding Effectivity > 100 dB
- · 69.5% Phase Velocity
- · FEP Jacket
- 500 Mating Cycles

#### **Applications**

· General Purpose

· Laboratory Use

#### **Description**

The 2.92mm male to 2.92mm male 12 inch cable using FM-SR086TBJ coax, part number FMCA3242-12, from Fairview Microwave is in-stock and ships same day. This Fairview 2.92mm to 2.92mm cable assembly has a male to male 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 FMCA3242-12 2.92mm male to 2.92mm male cable assembly operates to 20 GHz.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		20	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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]





#### FMCA3242-12

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Operating Voltage (AC)			335	Vrms

#### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	20	GHz
Insertion Loss (Typ.)	0.31	0.42	0.68	1	1.56	dB

**Electrical Specification Notes:** 

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.04xSQRT(fGHz) dB per connector.

#### **Mechanical Specifications**

**Cable Assembly** 

Length 12 in [304.8 mm] Width/Diameter 0.5 in [12.7 mm] Weight 0.03 lbs [13.61 g]

Cable

Cable Type FM-SR086TBJ Impedance 50 Ohms

Inner Conductor Type Solid

Copper Clad Steel, Silver Inner Conductor Material and Plating

Dielectric Type PTFE Number of Shields

Tinned Copper Composite Braid Outer Conductor 1 Material and Plating

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]



## 

#### FMCA3242-12

#### **Connectors**

Description	Connector 1	Connector 2
Туре	2.92mm Male	2.92mm Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 μin minimum	50 μin minimum
Dielectric Type	PEI	PEI
Body Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Body Plating Specification	50 μin minimum	50 μin minimum
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	ASTM-A582	ASTM-A582
Hex Size	5/16 inch	5/16 inch
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm

#### **Environmental Specifications**

Operating Range Temperature -55 to +125 deg C

Shock MIL-STD-202, Method 213, Condition I
Vibration MIL-STD-202, Method 204, ConditionD
Thermal Shock MIL-STD-202, Method 107, Condition B

Salt Fog MIL-STD-202, Method 101, Condition B, 5%salt solution

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

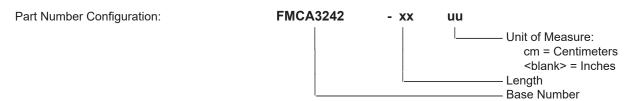




#### FMCA3242-12

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA3242-12 = 12 inches long cable FMCA3242-100cm = 100 cm long cable

2.92mm Male to 2.92mm Male Cable FM-SR086TBJ Coax in 12 Inch from Fairview Microwave is in-stock and available to ship sameday. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 2.92mm Male to 2.92mm Male Cable FM-SR086TBJ Coax in 12 Inch FMCA3242-12

URL: https://www.fairviewmicrowave.com/2.92mm-male-to-2.92mm-male-cable-fm-sr086tbj-coax-in-12-inch-fmca3242-12-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

