

# Low Loss RA SMA Male to RA SMA Male Cable LL160 Coax with LF Solder, 180 Degree Clocking

The RA SMA Male to RA SMA Male low loss cable using LL160 coax, part number FMCA1688, from Fairview Microwave is in-stock and ships same day. This SMA to SMA low loss cable assembly features a 82.5% velocity dielectric manufactured from expanded PTFE tape. This microporous dielectric contributes to the low loss and phase stability of the cables. Our triple shielded coaxial cable construction of Fairview's low loss LL160 provides shielding levels as high as 95 dB. The precision connections are constructed with stainless steel bodies and high temperature insulators, supporting a wide range of temperature from -55 to +165 degrees C. This solid combination of connectors and low loss coax are further enhanced with the addition of heavy-duty heat shrink for improved strain relief for this superior quality RF cable assembly.

Fairview's RA SMA Male to RA SMA Male low loss cable FMCA1688 datasheet, specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and high speed digital connections allows designers to configure and customize their signals however they like. From reducing losses or improving phase stability, Fairview microwave has the right low loss cable solutions to meet your needs.

## **Electrical Specifications**

Description	Min	Ty	/р Мах	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		82	5	%
RF Shielding	-90			dB
Capacitance		25 [8	2.02]	pF/ft [pF/m]
				1 / 21 / 2

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.1	0.14	0.21	0.31	0.46	dB/ft
	0.33	0.46	0.69	1.02	1.51	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

### **Mechanical Specifications**

## **Cable Assembly**

Weight 0.095 lbs [43.09 g]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1

LL160 50 Ohms

Copper, Silver

PTFE

Solid

Silver Plated Copper

# FMCA1688/PH180 DATA SHEET



## **Configuration:**

- SMA Male Right Angle
- SMA Male Right Angle
- LL160

## Features:

- Max Frequency 18 GHz
- Shielding Effectivity > -90 dB
- 82.5% Phase Velocity
- Triple Shielded
- FEP Jacket
- Low VSWR of 1.4:1 to 18 GHz
- -55 to +150 Temperature Range
- Expanded PTFE Tape Dielectric
- Same Day Shipment of Custom Lengths

# **Applications:**

- General Purpose
- Laboratory Use
- Automated Test Systems
- Military Electronics
- Phased Array Antennas
- RF Countermeasures

# **Cable Diagram:**





Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056

Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689

www.fairviewmicrowave.com sales@fairviewmicrowave.com





Shield Layer 2 Aluminum Polyester Shield Layer 3 Silver Plated Copper **FEP** 

Jacket Material

Jacket Diameter 0.16 in [4.06 mm]

Repeated Minimum Bend Radius 0.8 in [20.32 mm]

### **Connectors**

Connector 1 Connector 2			r 2	
9	SMA Male	SMA Male		
Į.	50 Ohms	50 Ohms		
Berylliu	ım Copper, G	iold Beryllium Copper, C		er, Gold
A	STM-B488		ASTM-B48	38
	PTFE		PTFE	
Passivate	ed Stainless	Steel	Passivated Stainl	ess Ste
ting Passivate	ed Stainless	Steel	Passivated Stainle	ess Ste
	Berylliu A Passivate	SMA Male 50 Ohms Beryllium Copper, G ASTM-B488 PTFE Passivated Stainless	SMA Male 50 Ohms Beryllium Copper, Gold ASTM-B488 PTFE Passivated Stainless Steel	SMA Male SMA Mal 50 Ohms 50 Ohms Beryllium Copper, Gold Beryllium Copp ASTM-B488 ASTM-B48 PTFE PTFE Passivated Stainless Steel Passivated Stainless

**Environmental Specifications** 

**Temperature** 

Operating Range -55 to +165 deg C

**Compliance Certifications** (see product page for current document)

FMCA1688/PH180-100cm = 100 cm long cable

**Plotted and Other Data** 

Notes:

## **How to Order**

Part Number Configuration: FMCA1688/PH180 uu - xx cm = Centimeters <black> = Inches Length Example: FMCA1688/PH180-12 = 12 inches long cable

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689





Low Loss RA SMA Male to RA SMA Male Cable LL160 Coax with LF Solder, 180 Degree Clocking from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low Loss RA SMA Male to RA SMA Male Cable LL160 Coax with LF Solder, 180 Degree Clocking FMCA1688/PH180

URL: https://www.fairviewmicrowave.com/low-loss-ra-sma-male-to-ra-sma-male-cable-ll160-coax-with-lf-solder-180-de-gree-clocking-fmca1688-ph180-p.aspx



301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689



