

Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components with LF Solder

FMCA10045

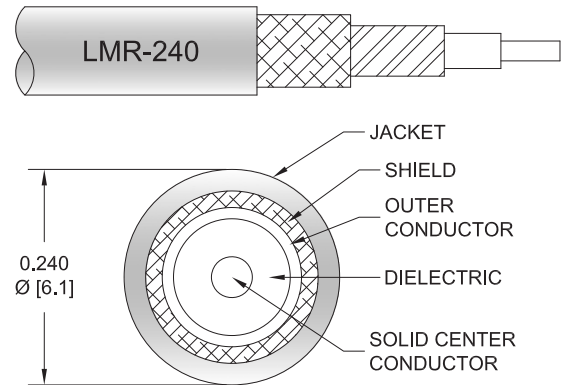


Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: N Male
- Cable Type: LMR-240
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

The RA SMA male to type N male cable using LMR-240 coax, part number FMCA10045, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10045 SMA male to type N male cable assembly operates to 6 GHz. The right angle SMA interface on the LMR-240 cable allows for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components with LF Solder

FMCA10045



Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA10045	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.13	0.2	dB/ft	
			0.13	0.19	0.26	0.43	0.67	dB/m	
FMCA10045-12	12 Inch	Insertion Loss (Typ.)	0.39	0.41	0.43	0.48	0.56	dB	0.034
FMCA10045-24	24 Inch	Insertion Loss (Typ.)	0.43	0.46	0.51	0.61	0.76	dB	0.043
FMCA10045-36	36 Inch	Insertion Loss (Typ.)	0.47	0.52	0.59	0.74	0.97	dB	0.052
FMCA10045-48	48 Inch	Insertion Loss (Typ.)	0.51	0.57	0.67	0.87	1.17	dB	0.046
FMCA10045-60	60 Inch	Insertion Loss (Typ.)	0.55	0.63	0.75	1	1.37	dB	0.075

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.25 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.025 pounds
Additional Weight per Inch:	0.09417 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.025 lbs [11.34 g]

Cable

Cable Type	LMR-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components with LF Solder

FMCA10045



Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	N Male
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Torque	7 in-lbs 0.79 Nm	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components with LF Solder



FMCA10045

Typical Performance Data

How to Order

Part Number Configuration:

FMCA10045

- xx

uu

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: FMCA10045-12 = 12 inches long cable
FMCA10045-100cm = 100 cm long cable

Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components with LF Solder from Fairview Microwave is in-stock and available to ship same-day. 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: [Low Loss RA SMA Male to N Male Cable LMR-240 Coax with Times Microwave Components with LF Solder FMCA10045](#)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-sma-male-to-n-male-cable-lmr-240-coax-with-times-microwave-components-with-lf-solder-fmca10045-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 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 liability arising out of the use of any part or document.

