

Fire Rated Low Loss N Male to SMA Male Cable TCOM-195-FR Coax With Times Microwave Components

FMCA100146

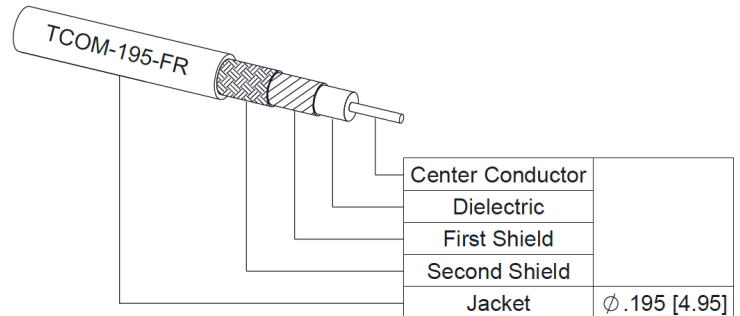


Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: TCOM-195-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- 80% Phase Velocity
- Triple Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

The type N male to SMA male cable using TCOM-195-FR coax, part number FMCA100146, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMA cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-195-FR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100146 type N male to SMA male cable assembly operates to 8 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness.

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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.16 [23.49]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.42 [11.22]		Ohms/1000ft [Ohms/Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2000	4000	8000	MHz	
FMCA100146	Custom Lengths Available	Insertion Loss (Typ.)	0.073	0.106	0.153	0.216	0.322	dB/ft	
			0.24	0.35	0.51	0.71	1.06	dB/m	
FMCA100146-12	12 inch	Insertion Loss (Typ.)	0.46	0.49	0.54	0.6	0.71	dB	0.138
FMCA100146-24	24 inch	Insertion Loss (Typ.)	0.53	0.6	0.69	0.82	1.03	dB	0.173
FMCA100146-36	36 inch	Insertion Loss (Typ.)	0.6	0.7	0.84	1.03	1.35	dB	0.208
FMCA100146-48	48 inch	Insertion Loss (Typ.)	0.68	0.81	1	1.25	1.67	dB	0.243
FMCA100146-60	60 inch	Insertion Loss (Typ.)	0.75	0.91	1.15	1.46	1.99	dB	0.278

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:	0.28 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.138 pounds
Additional Weight per Inch:	0.00291 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.138 lbs [62.6 g]

Cable

Cable Type	TCOM-195-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	3
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	ASTM B488
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Passivated Stainless Steel
Coupling Nut Material and Plating	Brass, Tri-Metal	Passivated Stainless Steel
Hex Size	13/16 Inch	5/16 Inch
Torque	9 in-lbs 1.02 Nm	

Environmental Specifications

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

Plotted and Other Data

Notes:

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FMCA100146

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100146** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA100146-12 = 12 inches long cable
FMCA100146-100cm = 100 cm long cable

Fire Rated Low Loss N Male to SMA Male Cable TCOM-195-FR Coax With Times Microwave Components 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: [Fire Rated Low Loss N Male to SMA Male Cable TCOM-195-FR Coax With Times Microwave Components FMCA100146](#)

URL: <https://www.fairviewmicrowave.com/fire-rated-low-loss-n-male-to-sma-male-cable-tcom-195-fr-coax-with-times-microwave-components-fmca100146-p.aspx>

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