

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

FMCA100142

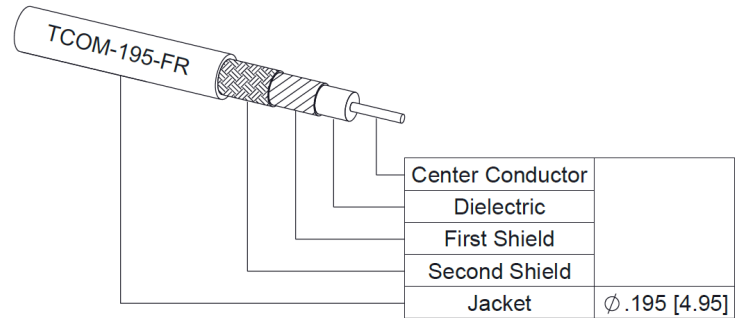


Configuration

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

Features

- Max Frequency 6 GHz
- 80% Phase Velocity
- Triple Shielded
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

The type N male to RA type N male cable using TCOM-195-FR coax, part number FMCA100142, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N 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 FMCA100142 type N male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the TCOM-195-FR cable allows for easier connections in tight spaces. 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		6	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	250	500	1000	2500	6000	MHz	
FMCA100142	Custom Lengths Available	Insertion Loss (Typ.)	0.036	0.073	0.106	0.172	0.271	dB/ft	
			0.12	0.24	0.35	0.57	0.89	dB/m	
FMCA100142-12	12 inch	Insertion Loss (Typ.)	0.52	0.56	0.59	0.66	0.76	dB	0.212
FMCA100142-24	24 inch	Insertion Loss (Typ.)	0.56	0.63	0.7	0.83	1.03	dB	0.247
FMCA100142-36	36 inch	Insertion Loss (Typ.)	0.59	0.7	0.8	1	1.3	dB	0.282
FMCA100142-48	48 inch	Insertion Loss (Typ.)	0.63	0.78	0.91	1.17	1.57	dB	0.317
FMCA100142-60	60 inch	Insertion Loss (Typ.)	0.66	0.85	1.01	1.34	1.84	dB	0.352

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:	0.2 dB
Base Weight:	0.212 pounds
Additional Weight per Inch:	0.00291 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.212 lbs [96.16 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	N Male Right Angle
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50µ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80µ in. minimum
Hex Size	13/16 Inch	30
Torque	9 in-lbs 1.02 Nm	

Environmental Specifications

Operating Range Temperature -40 to +125 deg C

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

Plotted and Other Data

Notes:

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FMCA100142

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100142** **- xx** **uu**

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

Length

Base Number

Example: FMCA100142-12 = 12 inches long cable
FMCA100142-100cm = 100 cm long cable

Fire Rated Low Loss N Male to RA N 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 RA N Male Cable TCOM-195-FR Coax With Times Microwave Components FMCA100142](#)

URL: <https://www.fairviewmicrowave.com/fire-rated-low-loss-n-male-to-ra-n-male-cable-tcom-195-fr-coax-with-times-microwave-components-fmca100142-p.aspx>

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