

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



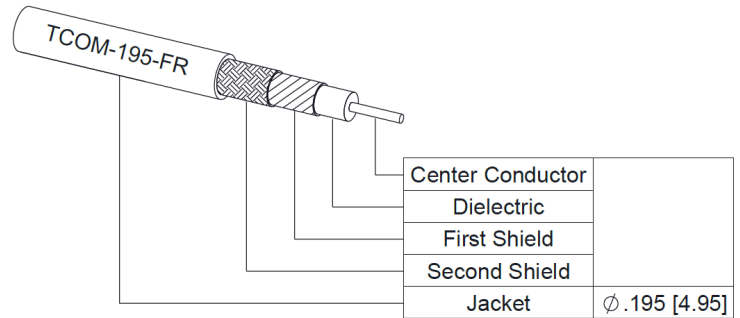
FMCA100144

Configuration

- Connector 1: SMA 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 SMA male to SMA male cable using TCOM-195-FR coax, part number FMCA100144, from Fairview Microwave is in-stock and ships same day. This Fairview SMA 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 FMCA100144 SMA 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	
FMCA100144	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	
FMCA100144-12	12 inch	Insertion Loss (Typ.)	0.28	0.31	0.36	0.42	0.53	dB	0.073
FMCA100144-24	24 inch	Insertion Loss (Typ.)	0.35	0.42	0.51	0.64	0.85	dB	0.108
FMCA100144-36	36 inch	Insertion Loss (Typ.)	0.42	0.52	0.66	0.85	1.17	dB	0.143
FMCA100144-48	48 inch	Insertion Loss (Typ.)	0.5	0.63	0.82	1.07	1.49	dB	0.178
FMCA100144-60	60 inch	Insertion Loss (Typ.)	0.57	0.73	0.97	1.28	1.81	dB	0.213

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: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.073 pounds
 Additional Weight per Inch: 0.00291 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.073 lbs [33.11 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	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	ASTM B488
Dielectric Type	Teflon	Teflon
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Hex Size	5/16 Inch	5/16 Inch

Environmental Specifications

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

Plotted and Other Data

Notes:

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FMCA100144

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100144

- xx

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

Example: FMCA100144-12 = 12 inches long cable
FMCA100144-100cm = 100 cm long cable

Fire Rated Low Loss SMA 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.

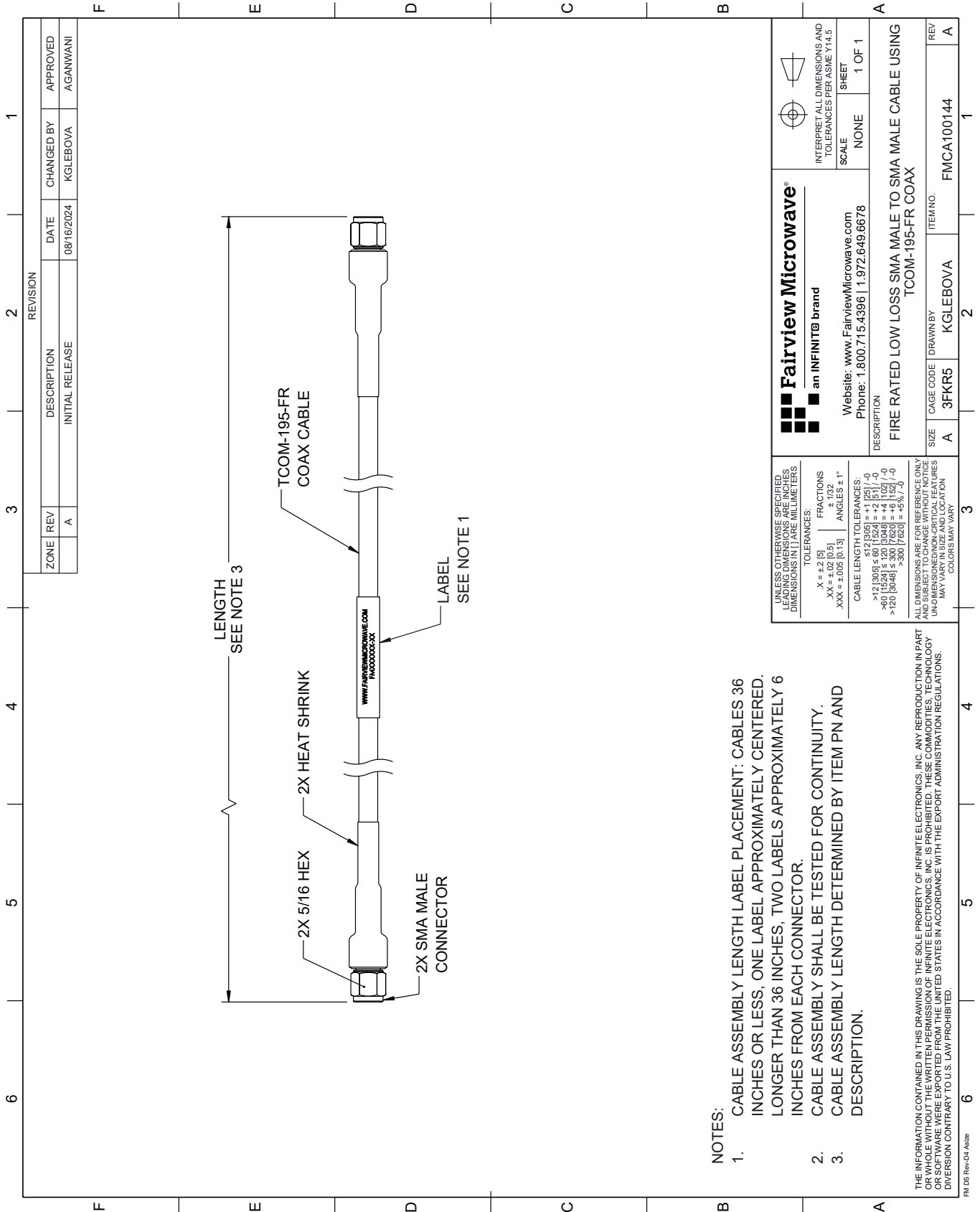
For additional information on this product, please click the following link: [Fire Rated Low Loss SMA Male to SMA Male Cable TCOM-195-FR Coax With Times Microwave Components FMCA100144](#)

URL: <https://www.fairviewmicrowave.com/fire-rated-low-loss-sma-male-to-sma-male-cable-tcom-195-fr-coax-with-times-microwave-components-fmca100144-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.

FMCA100144 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 36 INCHES OR LESS; ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 Alt2b

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	08/16/2024	KGLEBOVA	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

<p>Fairview Microwave® an INFINITIB brand</p>		
Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION FIRE RATED LOW LOSS SMA MALE TO SMA MALE CABLE USING TCOM-195-FR COAX		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	FMCA100144
REV	DRAWN BY	REV
A	KGLEBOVA	A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = +2 [51] / -0
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0
 >120 [3048] ≤ 300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE NON-CRITICAL FEATURES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.