

## Low Loss N Male to N Male Cable TCOM-195 Coax With Times Microwave Components



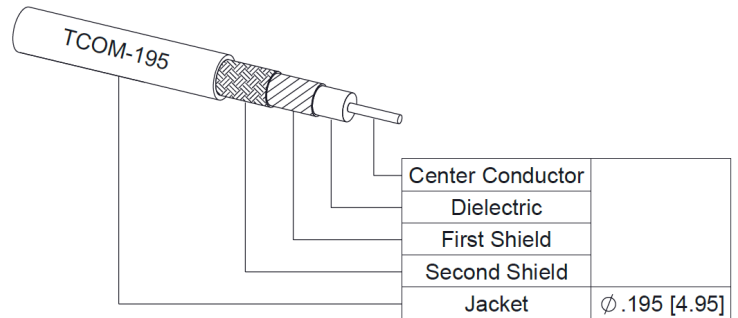
### FMCA100131

#### Configuration

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

#### Features

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



#### Applications

- General Purpose
- Laboratory Use

#### Description

The type N male to type N male cable using TCOM-195 coax, part number FMCA100131, 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 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100131 type N male to type N 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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**FMCA100131**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	500	1000	2000	4000	8000	
FMCA100131	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	
FMCA100131-12	12 inch	Insertion Loss (Typ.)	0.64	0.67	0.72	0.78	0.89	dB	0.203
FMCA100131-24	24 inch	Insertion Loss (Typ.)	0.71	0.78	0.87	1	1.21	dB	0.238
FMCA100131-36	36 inch	Insertion Loss (Typ.)	0.78	0.88	1.02	1.21	1.53	dB	0.273
FMCA100131-48	48 inch	Insertion Loss (Typ.)	0.86	0.99	1.18	1.43	1.85	dB	0.308
FMCA100131-60	60 inch	Insertion Loss (Typ.)	0.93	1.09	1.33	1.64	2.17	dB	0.343

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: 0.28 dB  
 Base Weight: 0.203 pounds  
 Additional Weight per Inch: 0.00291 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter 0.5 in [12.7 mm]  
 Weight 0.203 lbs [92.08 g]

**Cable**

Cable Type TCOM-195  
 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
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	13/16 Inch	13/16 Inch
Torque	9 in-lbs 1.02 Nm	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:

## Low Loss N Male to N Male Cable TCOM-195 Coax With Times Microwave Components



### FMCA100131

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMCA100131**

**- xx**

**uu**

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

Example: FMCA100131-12 = 12 inches long cable  
FMCA100131-100cm = 100 cm long cable

Low Loss N Male to N Male Cable TCOM-195 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.

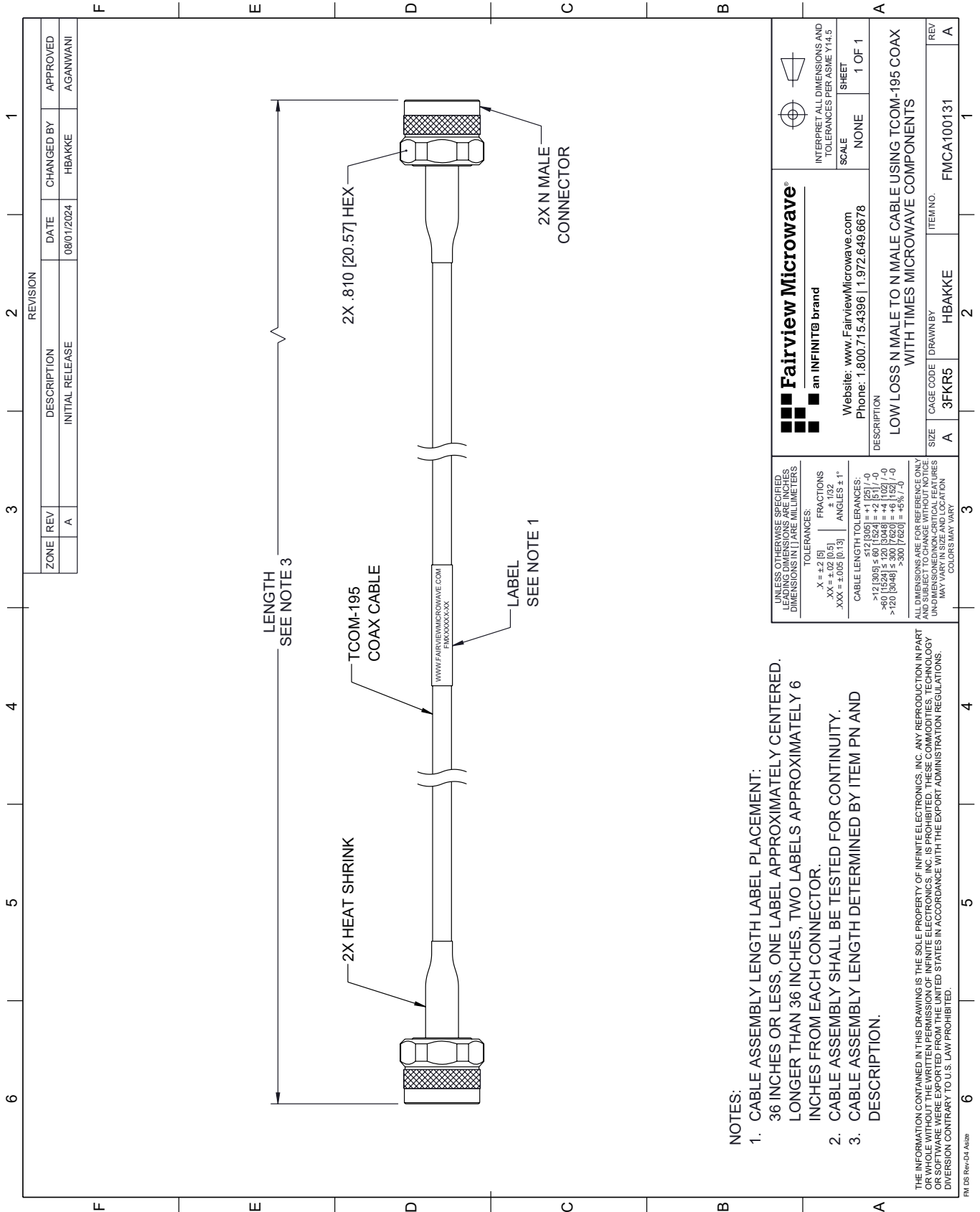
For additional information on this product, please click the following link: [Low Loss N Male to N Male Cable TCOM-195 Coax With Times Microwave Components FMCA100131](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-n-male-cable-tcom-195-coax-with-times-microwave-components-fmca100131-p.aspx>

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# FMCA100131 CAD Drawing

Low Loss N Male to N Male Cable TCOM-195 Coax With Times Microwave Components



- NOTES:**
1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 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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<p><b>Fairview Microwave®</b> an INFINIT® brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE SHEET: 1 OF 1</p>
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:          .X = ±.2 [5]          .XX = ±.02 [0.5]          .XXX = ±.005 [0.13]          FRACTIONS ± 1/32          ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:          ≤ 12 [305] ± .60 [1524] = ± 2 [51] / -0          &gt; 12 [305] ≤ 60 [1524] = ± 4 [102] / -0          &gt; 60 [1524] ≤ 120 [3048] = ± 4 [102] / -0          &gt; 120 [3048] ≤ 300 [7620] = ± 6 [152] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		
<p>DESCRIPTION</p> <p>LOW LOSS N MALE TO N MALE CABLE USING TCOM-195 COAX WITH TIMES MICROWAVE COMPONENTS</p>	<p>SIZE</p> <p>A</p>	<p>ITEM NO.</p> <p>FMCA100131</p>
<p>REVISION</p>	<p>DATE</p> <p>08/01/2024</p>	<p>APPROVED</p> <p>AGANWANI</p>
<p>CHANGED BY</p> <p>HBAKKE</p>	<p>DESCRIPTION</p> <p>INITIAL RELEASE</p>	<p>ZONE</p> <p>REV</p> <p>A</p>