



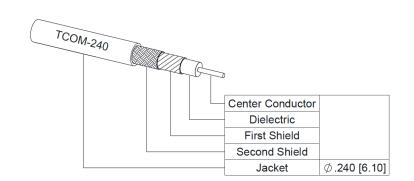
### FMCA100099

#### Configuration

Connector 1: 4.3-10 Male
Connector 2: N Male
Cable Type: TCOM-240
Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- · 84% Phase Velocity
- · Double Shielded
- PE Jacket
- · 500 Mating Cycles



## **Applications**

· General Purpose

· Laboratory Use

Low PIM Applications

### **Description**

The 4.3-10 male to type N male cable using TCOM-240 coax, part number FMCA100099, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to type N cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. Our low PIM design offers excellent passive intermodulation performance. The FMCA100099 4.3-10 male to type N male cable assembly operates to 6 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 100 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	100			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Passive Intermodulation		-155		dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
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		2.06 [6.76]		Ohms/1000ft [Ohms/Km]





### FMCA100099

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

PE, Black

**Specifications by Frequency** 

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA100099	Custom Lengths	Insertion Loss (Typ.)	0.037	0.052	0.076	0.123	0.197	dB/ft	
TWCA100033	Available	ilisertion Loss (Typ.)	0.13	0.18	0.25	0.41	0.65	dB/m	
FMCA100099-12	12 inch	Insertion Loss (Typ.)	0.53	0.55	0.57	0.62	0.69	dB	0.23
FMCA100099-24	24 inch	Insertion Loss (Typ.)	0.57	0.6	0.65	0.74	0.89	dB	0.26
FMCA100099-36	36 inch	Insertion Loss (Typ.)	0.61	0.65	0.72	0.86	1.09	dB	0.29
FMCA100099-48	48 inch	Insertion Loss (Typ.)	0.64	0.7	0.8	0.99	1.28	dB	0.32
FMCA100099-60	60 inch	Insertion Loss (Typ.)	0.68	0.75	0.87	1.11	1.48	dB	0.35

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 1:0.245 dBLoss due to Connector 2:0.245 dBBase Weight:0.23 poundsAdditional Weight per Inch:0.0025 pounds

### **Mechanical Specifications**

## Cable Assembly

Jacket Material

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.23 lbs [104.33 g]

#### Cable

Cable TypeTCOM-240Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePE (F)

Number of Shields 2
Shield Layer 1 Silver Plated Copper Braid
Shield Layer 2 Tinned Copper Braid

Jacket Diameter0.24 in [6.1 mm]One Time Minimum Bend Radius0.75 in [19.05 mm]Repeated Minimum Bend Radius2.5 in [63.5 mm]

| Dending Moment | Dend Radids | Dend Radids





## FMCA100099

#### **Connectors**

Description	Connector 1	Connector 2
Туре	4.3-10 Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	brass, Tri-Metal	Brass, Tri-Metal

## **Environmental Specifications**

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

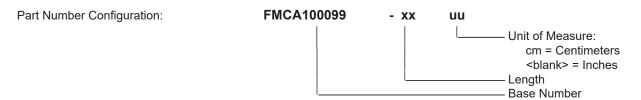




## FMCA100099

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA100099-12 = 12 inches long cable

FMCA100099-100cm = 100 cm long cable

Low PIM 4.3-10 Male to N Male Cable TCOM-240 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 PIM 4.3-10 Male to N Male Cable TCOM-240 Coax With Times Microwave Components FMCA100099

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-to-n-male-cable-tcom-240-coax-with-times-microwave-components-fmca100099-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 impliment 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.

