

## Low Loss N Male to SMA Male Cable TCOM-400 Coax



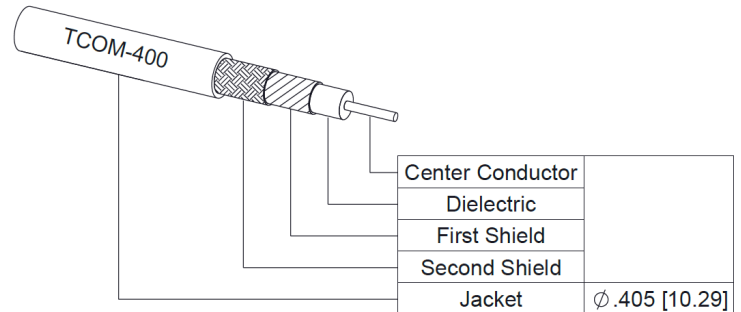
### FMCA100182

#### Configuration

- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: TCOM-400
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

The type N male to SMA male cable using TCOM-400 coax, part number FMCA100182, 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-400 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100182 type N male to SMA 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		85		%
RF Shielding	100			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.47 [4.82]		Ohms/1000ft [Ohms/Km]

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**FMCA100182**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
FMCA100182	Custom Lengths Available	Insertion Loss (Typ.)	0.021	0.03	0.044	0.072	0.117	dB/ft	
			0.07	0.1	0.15	0.24	0.39	dB/m	
FMCA100182-12	12 inch	Insertion Loss (Typ.)	0.23	0.23	0.25	0.28	0.32	dB	0.206
FMCA100182-24	24 inch	Insertion Loss (Typ.)	0.25	0.26	0.29	0.35	0.44	dB	0.286
FMCA100182-36	36 inch	Insertion Loss (Typ.)	0.27	0.29	0.34	0.42	0.56	dB	0.366
FMCA100182-48	48 inch	Insertion Loss (Typ.)	0.29	0.32	0.38	0.49	0.67	dB	0.446
FMCA100182-60	60 inch	Insertion Loss (Typ.)	0.31	0.35	0.42	0.56	0.79	dB	0.526

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:	0.206 pounds
Additional Weight per Inch:	0.00666 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.206 lbs [93.44 g]

**Cable**

Cable Type	TCOM-400
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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**Connectors**

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	50µ" Minimum
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	18 mm	
Torque		7 in-lbs 0.79 Nm

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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**Typical Performance Data**

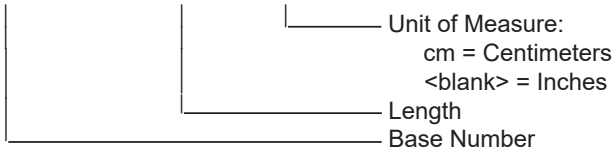
**How to Order**

Part Number Configuration:

**FMCA100182**

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Example: FMCA100182-12 = 12 inches long cable  
 FMCA100182-100cm = 100 cm long cable

Low Loss N Male to SMA Male Cable TCOM-400 Coax 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 SMA Male Cable TCOM-400 Coax FMCA100182](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-sma-male-cable-tcom-400-coax-fmca100182-p.aspx>

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# FMCA100182 CAD Drawing

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