

## Low Loss 7/16 DIN Male to N Male Cable TCOM-600 Coax



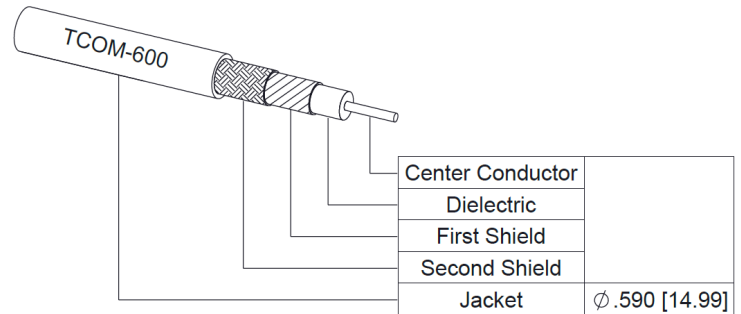
### FMCA100180

#### Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: N Male
- Cable Type: TCOM-600
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 100 dB
- 87% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

The 7/16 DIN male to type N male cable using TCOM-600 coax, part number FMCA100180, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to type N cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-600 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100180 7/16 DIN 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		87		%
RF Shielding	100			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.53 [1.74]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.52 [4.99]		Ohms/1000ft [Ohms/Km]

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**FMCA100180**

**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	
FMCA100180	Custom Lengths Available	Insertion Loss (Typ.)	0.013	0.019	0.028	0.046	0.077	dB/ft	
			0.05	0.07	0.1	0.16	0.26	dB/m	
FMCA100180-24	24 inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.3	0.36	dB	0.599
FMCA100180-36	36 inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.44	dB	0.736
FMCA100180-48	48 inch	Insertion Loss (Typ.)	0.26	0.28	0.32	0.39	0.51	dB	0.873
FMCA100180-120	120 inch	Insertion Loss (Typ.)	0.33	0.39	0.48	0.66	0.97	dB	1.695
FMCA100180-180	180 inch	Insertion Loss (Typ.)	0.4	0.49	0.62	0.89	1.36	dB	2.379

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:	0.462 pounds
Additional Weight per Inch:	0.01283 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.462 lbs [209.56 g]

**Cable**

Cable Type	TCOM-600
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	0.59 in [14.99 mm]
One Time Minimum Bend Radius	1.5 in [38.1 mm]
Repeated Minimum Bend Radius	6 in [152.4 mm]
Bending Moment	2.75 lbs-ft [3.73 N-m]
Flat Plate Crush	60 lbs/in [1.07 Kg/mm]
Tensile Strength	350 lbs [158.76 Kg]

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**Connectors**

Description	Connector 1	Connector 2
Type	7/16 DIN Male	N Male
Specification	IEC 61169-4	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Gold
Contact Plating Specification		50µ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		100µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		100µ in. minimum
Hex Size		20.57 mm
Torque		44 in-lbs 4.97 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**

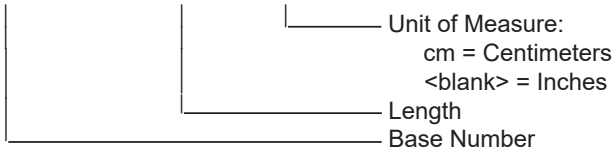
**How to Order**

Part Number Configuration:

**FMCA100180**

**- xx**

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Example: FMCA100180-12 = 12 inches long cable  
FMCA100180-100cm = 100 cm long cable

Low Loss 7/16 DIN Male to N Male Cable TCOM-600 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 7/16 DIN Male to N Male Cable TCOM-600 Coax FMCA100180](https://www.fairviewmicrowave.com/low-loss-7-16-din-male-to-n-male-cable-tcom-600-coax-fmca100180-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-7-16-din-male-to-n-male-cable-tcom-600-coax-fmca100180-p.aspx>

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# FMCA100180 CAD Drawing

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