

SMA Female to TNC Female Cable RG-316 Coax

FMCA10007

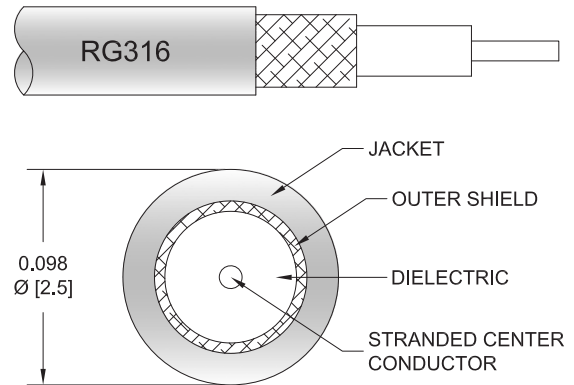


Configuration

- Connector 1: SMA Female
- Connector 2: TNC Female
- Cable Type: RG-316
- Coax Cable Group: 8
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

The SMA female to TNC female cable using RG-316 coax, part number FMCA10007, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a female to female gender configuration with 50 ohm flexible RG-316 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA10007 SMA female to TNC female cable assembly operates to 3 GHz.

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		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA10007	Custom Lengths Available	Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.58	dB/ft	
			0.37	0.53	0.79	1.25	1.91	dB/m	
FMCA10007-12	12 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.58	0.78	dB	0.048
FMCA10007-24	24 inch	Insertion Loss (Typ.)	0.42	0.52	0.68	0.96	1.36	dB	0.059
FMCA10007-36	36 inch	Insertion Loss (Typ.)	0.53	0.68	0.92	1.34	1.94	dB	0.069
FMCA10007-48	48 inch	Insertion Loss (Typ.)	0.64	0.84	1.16	1.72	2.52	dB	0.079
FMCA10007-72	72 inch	Insertion Loss (Typ.)	0.86	1.16	1.63	2.48	3.68	dB	0.099

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: 0.048 pounds
 Additional Weight per Inch: 0.00084 pounds

Mechanical Specifications

Cable Assembly

Weight 0.048 lbs [21.77 g]

Cable

Cable Type RG-316
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 1
 Shield Layer 1 Silver Plated Copper Braid
 Jacket Material FEP, Tan
 Jacket Diameter 0.102 in [2.59 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Female	TNC Female
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	Brass, Nickel
Outer Conductor Plating Specification	3 µin minimum	100 µin minimum
Body Material and Plating		Brass, Nickel
Body Plating Specification		100 µin minimum
Hex Size	1/4 inch	

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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FMCA10007

Typical Performance Data

How to Order

Part Number Configuration:

FMCA10007

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Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA10007-12 = 12 inches long cable
FMCA10007-100cm = 100 cm long cable

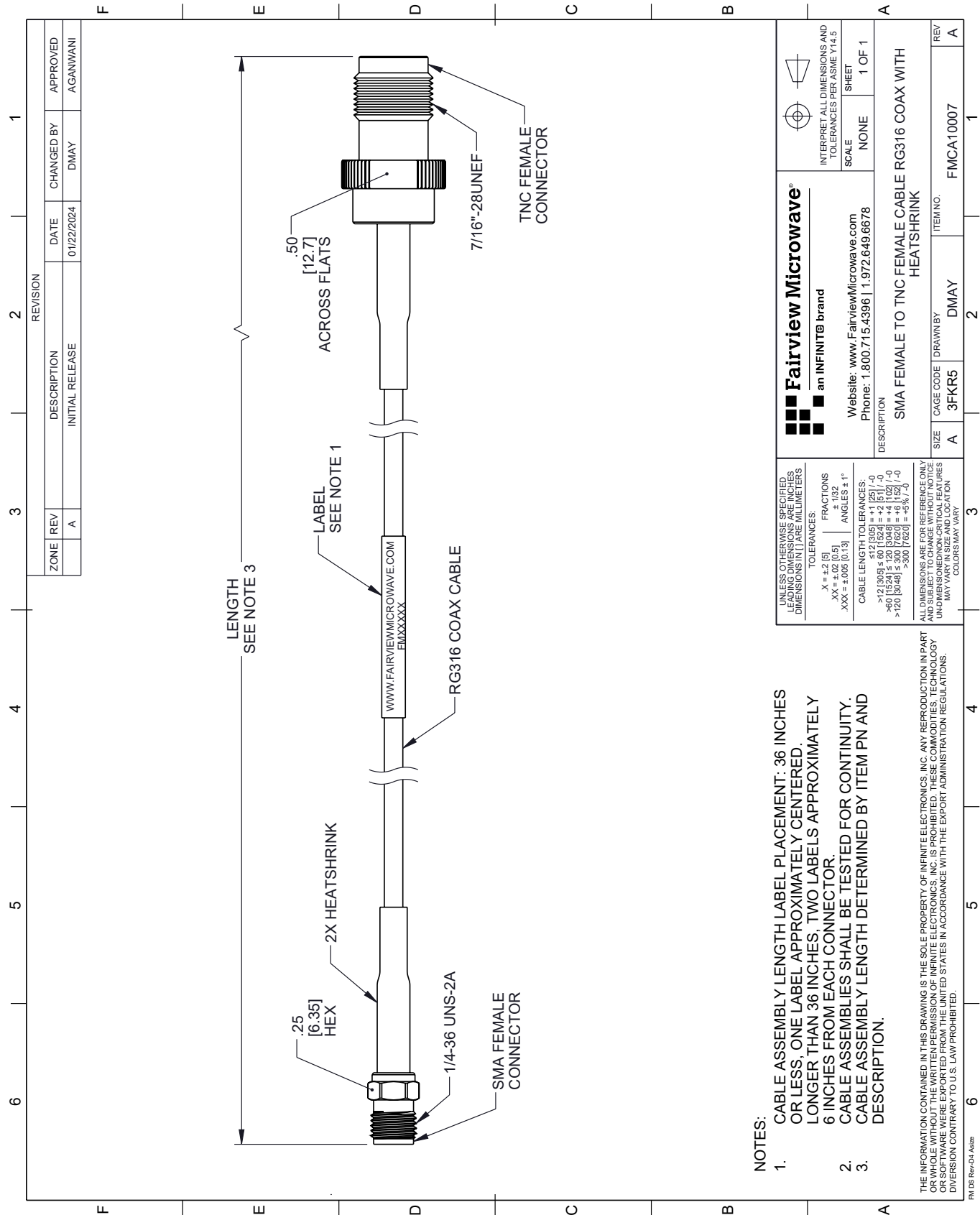
SMA Female to TNC Female Cable RG-316 Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Female to TNC Female Cable RG-316 Coax FMCA10007](#)

URL: <https://www.fairviewmicrowave.com/sma-female-to-tnc-female-cable-rg-316-coax-fmca10007-p.aspx>

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FMCA10007 CAD Drawing
SMA Female to TNC Female Cable RG-316 Coax



- NOTES:
- 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.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.