

Fire Rated N Male to N Male Right Angle Low Loss Cable Using TCOM-400-FR Coax With Times Microwave Components



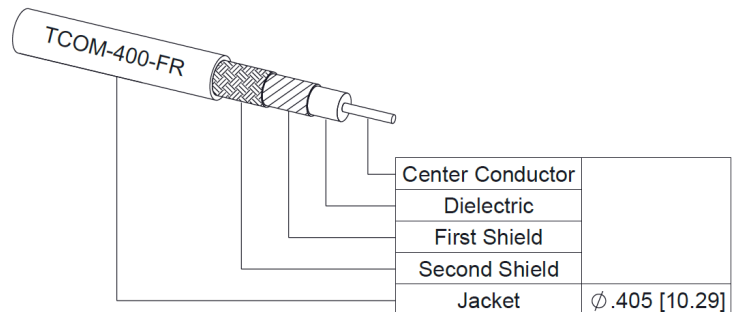
PE3C10414

Configuration

- Connector 1: N Male
- Connector 2: N Male Right Angle
- Cable Type: TCOM-400-FR
- 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

Pasternack's PE3C10414 type N male to type N male right angle cable using TCOM-400-FR coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-400-FR coax. The PE3C10414 type N male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the TCOM-400-FR cable allows for easier connections in tight spaces. The double shielding of this Pasternack 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 available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. 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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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						
PE3C10414	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	
PE3C10414-12	12 inch	Insertion Loss (Typ.)	0.33	0.33	0.35	0.38	0.42	dB	0.317
PE3C10414-24	24 inch	Insertion Loss (Typ.)	0.35	0.36	0.39	0.45	0.54	dB	0.397
PE3C10414-36	36 inch	Insertion Loss (Typ.)	0.37	0.39	0.44	0.52	0.66	dB	0.477
PE3C10414-48	48 inch	Insertion Loss (Typ.)	0.39	0.42	0.48	0.59	0.77	dB	0.557
PE3C10414-60	60 inch	Insertion Loss (Typ.)	0.41	0.45	0.52	0.66	0.89	dB	0.637

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:	0.2 dB
Base Weight:	0.317 pounds
Additional Weight per Inch:	0.00666 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.317 lbs [143.79 g]

Cable

Cable Type	TCOM-400-FR
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	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 μ in. minimum	
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 μ in. minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150 μ in. minimum	
Hex Size	13/16 inch	13/16 inch
Torque		30 in-lbs 3.39 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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PE3C10414

Typical Performance Data

How to Order

Part Number Configuration:

PE3C10414

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10414-12 = 12 inches long cable
PE3C10414-100cm = 100 cm long cable

Fire Rated N Male to N Male Right Angle Low Loss Cable Using TCOM-400-FR Coax With Times Microwave Components from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male to N Male Right Angle Low Loss Cable Using TCOM-400-FR Coax With Times Microwave Components PE3C10414](#)

URL: <https://www.pasternack.com/fire-rated-n-male-to-n-male-low-loss-cable-using-tcom-400-fr-pe3c10414-p.aspx>

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PE3C10414 CAD Drawing

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