

Fire Rated N Male to N Male Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components



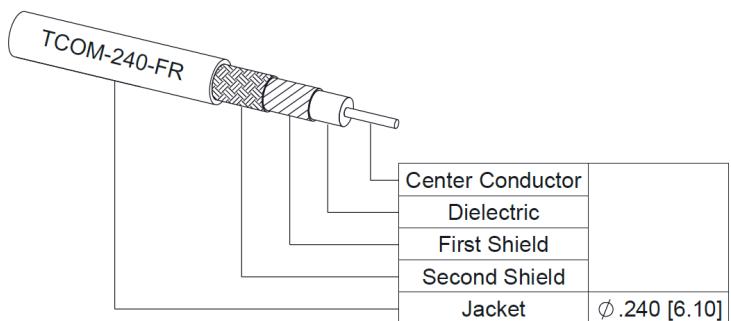
PE3C10345

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: TCOM-240-FR
- 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

Pasternack's PE3C10345 type N male to type N male cable using TCOM-240-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-240-FR coax. The PE3C10345 type N male to type N male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance. 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		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]

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Electrical Specifications

Description	Minimum	Typical					Maximum	Units
Jacket Spark						5,000		Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3C10345	Custom Lengths Available	Insertion Loss (Typ.)	0.037	0.052	0.076	0.123	0.197	dB/ft	
			0.13	0.18	0.25	0.41	0.65	dB/m	
PE3C10345-12	12 inch	Insertion Loss (Typ.)	0.53	0.55	0.57	0.62	0.69	dB	0.225
PE3C10345-24	24 inch	Insertion Loss (Typ.)	0.57	0.6	0.65	0.74	0.89	dB	0.27
PE3C10345-36	36 inch	Insertion Loss (Typ.)	0.61	0.65	0.72	0.86	1.09	dB	0.315
PE3C10345-48	48 inch	Insertion Loss (Typ.)	0.64	0.7	0.8	0.99	1.28	dB	0.36
PE3C10345-60	60 inch	Insertion Loss (Typ.)	0.68	0.75	0.87	1.11	1.48	dB	0.405

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 dB
Loss due to Connector 2: 0.245 dB
Base Weight: 0.225 pounds
Additional Weight per Inch: 0.00375 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
Weight 0.225 lbs [102.06 g]

Cable

Cable Type TCOM-240-FR
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper
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 0.24 in [6.1 mm]
One Time Minimum Bend Radius 0.75 in [19.05 mm]
Repeated Minimum Bend Radius 2.5 in [63.5 mm]
Bending Moment 0.25 lbs-ft [0.34 N-m]
Flat Plate Crush 20 lbs/in [0.36 Kg/mm]
Tensile Strength 80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N 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:

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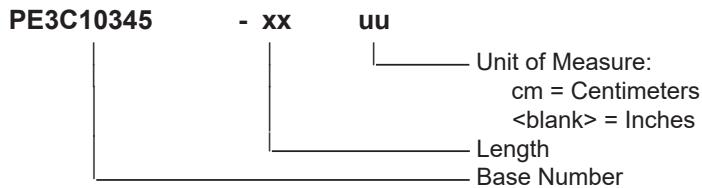


PE3C10345

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C10345-12 = 12 inches long cable
PE3C10345-100cm = 100 cm long cable

Fire Rated N Male to N Male Low PIM Cable Using TCOM-240-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 Low PIM Cable Using TCOM-240-FR Coax With Times Microwave Components PE3C10345](#)

URL: <https://www.pasternack.com/fire-rated-n-male-to-n-male-low-pim-cable-using-tcom-240-fr-pe3c10345-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 implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C10345 CAD Drawing

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