

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



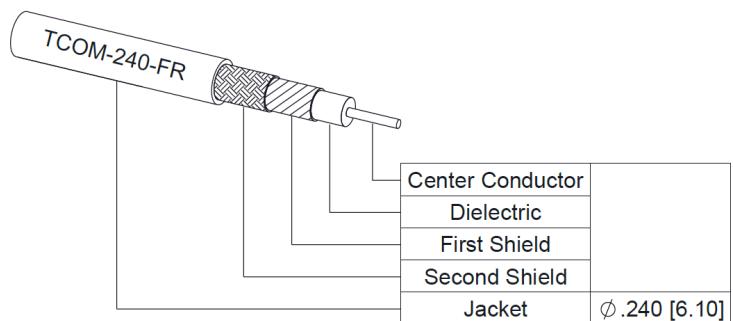
PE3C10398

Configuration

- Connector 1: N Male
- Connector 2: N Female Bulkhead
- 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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10398 type N male to type N female bulkhead 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 female gender configuration with 50 ohm flexible TCOM-240-FR coax. The PE3C10398 type N male to type N female cable assembly operates to 6 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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]
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	
PE3C10398	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	
PE3C10398-12	12 inch	Insertion Loss (Typ.)	0.42	0.44	0.46	0.51	0.58	dB	0.224
PE3C10398-24	24 inch	Insertion Loss (Typ.)	0.46	0.49	0.54	0.63	0.78	dB	0.269
PE3C10398-36	36 inch	Insertion Loss (Typ.)	0.5	0.54	0.61	0.75	0.98	dB	0.314
PE3C10398-48	48 inch	Insertion Loss (Typ.)	0.53	0.59	0.69	0.88	1.17	dB	0.359
PE3C10398-60	60 inch	Insertion Loss (Typ.)	0.57	0.64	0.76	1	1.37	dB	0.404

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: 0.28 dB
Base Weight: 0.224 pounds
Additional Weight per Inch: 0.00375 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
Weight 0.224 lbs [101.6 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 Female Bulkhead
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification		50 μ inches
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		80 μ inches
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	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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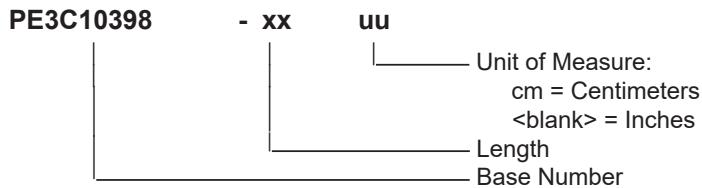


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Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C10398-12 = 12 inches long cable
PE3C10398-100cm = 100 cm long cable

Fire Rated N Male to N Female Bulkhead Low Loss 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.

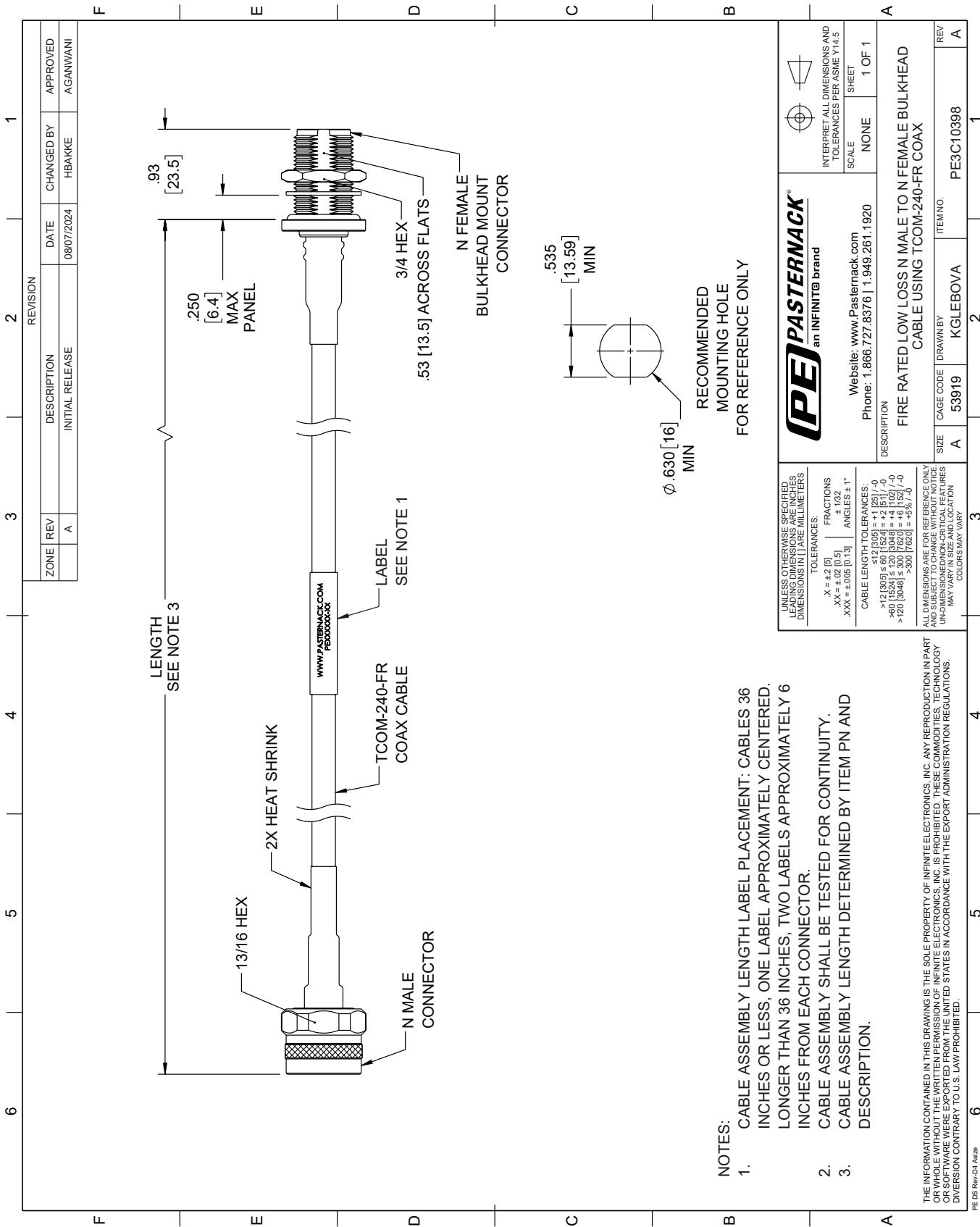
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male to N Female Bulkhead Low Loss Cable Using TCOM-240-FR Coax With Times Microwave Components PE3C10398](#)

URL: <https://www.pasternack.com/fire-rated-n-male-to-n-female-bulkhead-low-loss-cable-using-tcom-240-fr-pe3c10398-p.aspx>

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PE3C10398 CAD Drawing

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