

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



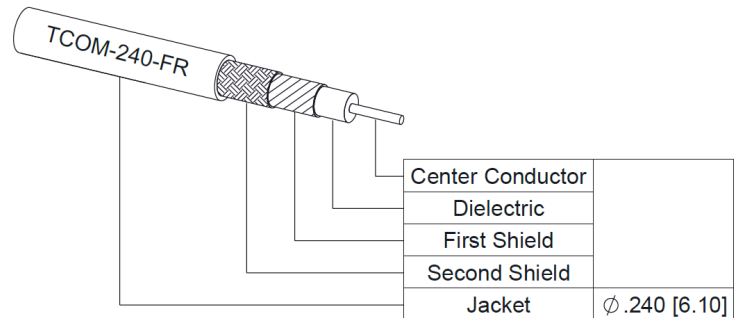
PE3C10406

Configuration

- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: TCOM-240-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 100 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10406 BNC male to BNC 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 BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-240-FR coax. The PE3C10406 BNC male to BNC male cable assembly operates to 4 GHz. 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		4	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						
PE3C10406	Custom Lengths Available	Insertion Loss (Typ.)	0.019	0.037	0.052	0.076	0.155	dB/ft	
			0.07	0.13	0.18	0.25	0.51	dB/m	
PE3C10406-12	12 inch	Insertion Loss (Typ.)	0.22	0.24	0.26	0.28	0.36	dB	0.109
PE3C10406-24	24 inch	Insertion Loss (Typ.)	0.24	0.28	0.31	0.36	0.51	dB	0.154
PE3C10406-36	36 inch	Insertion Loss (Typ.)	0.26	0.32	0.36	0.43	0.67	dB	0.199
PE3C10406-48	48 inch	Insertion Loss (Typ.)	0.28	0.35	0.41	0.51	0.82	dB	0.244
PE3C10406-60	60 inch	Insertion Loss (Typ.)	0.3	0.39	0.46	0.58	0.98	dB	0.289

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:	0.109 pounds
Additional Weight per Inch:	0.00375 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.109 lbs [49.44 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	BNC Male	BNC Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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



PE3C10406

Typical Performance Data

How to Order

Part Number Configuration:

PE3C10406

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10406-12 = 12 inches long cable
PE3C10406-100cm = 100 cm long cable

Fire Rated BNC Male to BNC Male 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.

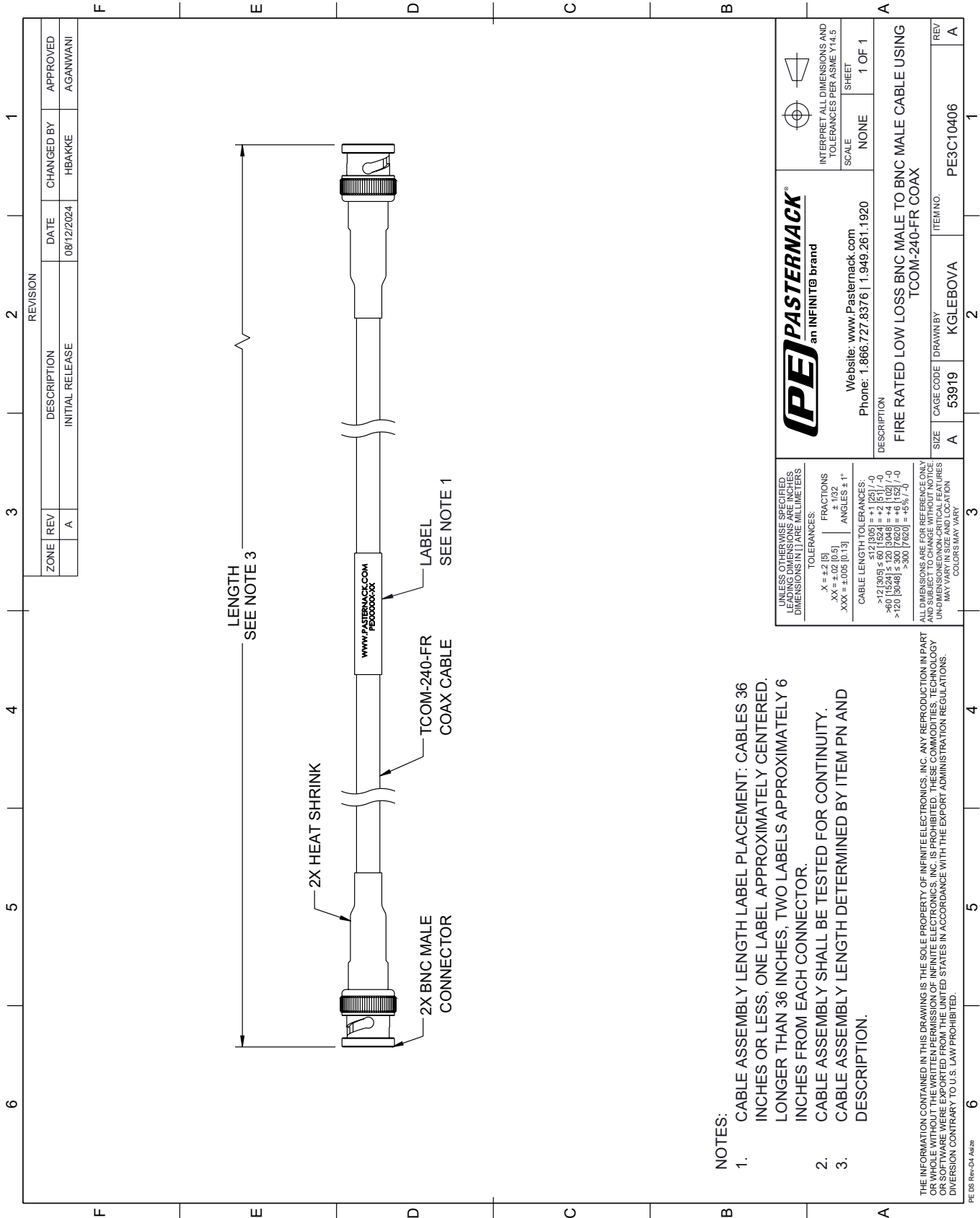
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated BNC Male to BNC Male Low Loss Cable Using TCOM-240-FR Coax With Times Microwave Components PE3C10406](#)

URL: <https://www.pasternack.com/fire-rated-bnc-male-to-bnc-male-low-loss-cable-using-tcom-240-fr-pe3c10406-p.aspx>

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PE3C10406 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 36 INCHES OR LESS; ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 Add2

REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	08/12/2024	HBAKKE	AGANWANI

 an INFINITE brand		Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION FIRE RATED LOW LOSS BNC MALE TO BNC MALE CABLE USING TCOM-240-FR COAX			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KGLEBOVA	PE3C10406

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS
 ± 1/32

ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. COLORS MAY VARY.