

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



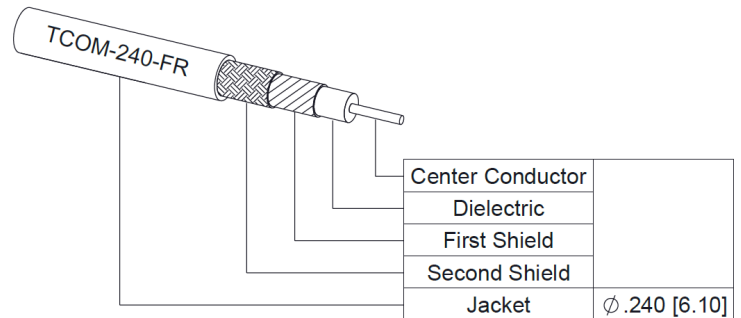
### PE3C10394

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA 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



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C10394 SMA male to SMA 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 SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible TCOM-240-FR coax. The PE3C10394 SMA male to SMA male cable assembly operates to 6 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		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						
PE3C10394	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	
PE3C10394-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.4	dB	0.087
PE3C10394-24	24 inch	Insertion Loss (Typ.)	0.28	0.31	0.36	0.45	0.6	dB	0.132
PE3C10394-36	36 inch	Insertion Loss (Typ.)	0.32	0.36	0.43	0.57	0.8	dB	0.177
PE3C10394-48	48 inch	Insertion Loss (Typ.)	0.35	0.41	0.51	0.7	0.99	dB	0.222
PE3C10394-60	60 inch	Insertion Loss (Typ.)	0.39	0.46	0.58	0.82	1.19	dB	0.267

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:	0.087 pounds
Additional Weight per Inch:	0.00375 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.087 lbs [39.46 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	SMA Male	SMA Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM B488	ASTM B488
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	Passivated Stainless Steel, Gold
Body Material and Plating	Passivated Stainless Steel, Gold	Passivated Stainless Steel, Gold
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2700

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

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### PE3C10394

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C10394**

- **xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10394-12 = 12 inches long cable  
PE3C10394-100cm = 100 cm long cable

Fire Rated SMA Male to SMA 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.

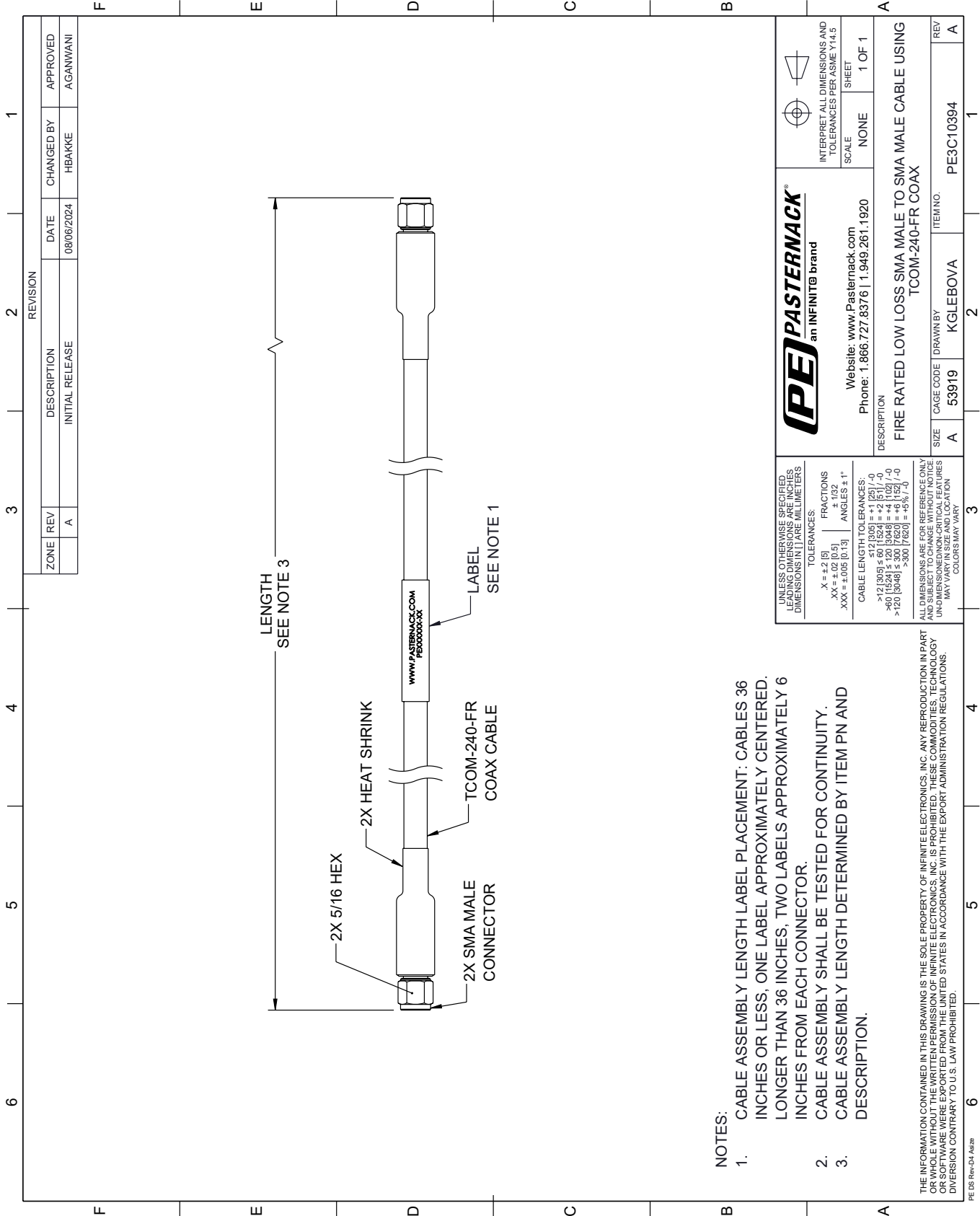
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated SMA Male to SMA Male Low Loss Cable Using TCOM-240-FR Coax With Times Microwave Components PE3C10394](#)

URL: <https://www.pasternack.com/fire-rated-sma-male-to-sma-male-low-loss-cable-using-tcom-240-fr-pe3c10394-p.aspx>

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# PE3C10394 CAD Drawing

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



**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			
	A	08/06/2024	HBAKKE	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920			
DESCRIPTION FIRE RATED LOW LOSS SMA MALE TO SMA MALE CABLE USING TCOM-240-FR COAX			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KGLEBOVA	PE3C10394
		REV	A

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 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 >300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.