



## PE-TC151 Series Phase Stable Test Cable SMA Male to SMA Male to 27 GHz 48 Inch Length ,RoHS

### RF Cable Assemblies Technical Data Sheet

PE3TC0401-48

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-TC151

#### Features

- Phase and Amplitude stability with flexure
- Small Diameter Lighter weight lower profile for high density test applications
- Phase change with flexure +/-5° to 27 GHz
- Excellent for multi-port test equipment
- Very flexible and durable cable with a min bend radius of 0.75 inches
- Excellent VSWR and Insertion Loss
- Extra strain relief for extended connector body with booting enhance stability and longevity
- Each Serialized assembly come with matching Test data
- 5,000 mating cycles when properly mated
- IN STOCK and ready to ship

#### Applications

- Automated RF Test Stations
- General Purpose Lab Testing
- High Connection Density Lab and Production testing

#### Description

Pasternack's high performance PE-TC151 series Test Cables are designed to allow customers to perform repeatable accurate measurements. Because these cables are phase stable under flexure, +/- 5° at 27 GHz, they are an excellent option for testing where movement will occur during testing. The PE-TC151 test cables have low Insertion Loss and low VSWR in addition to having excellent phase stability properties. The rugged design provides for up to 5,000 mattings cycles with proper care. The smaller diameter coax allows for high flexibility, lower profile and a lighter weight test cable. The PE-TC151 series test cables are an excellent choice for use in precision high density test environments

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		27	GHz
VSWR			1.3:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		28.8 [94.49]		pF/ft [pF/m]
Phase Stability with Flexure		±5		Degrees

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [PE-TC151 Series Phase Stable Test Cable SMA Male to SMA Male to 27 GHz 48 Inch Length ,RoHS PE3TC0401-48](#)



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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	12	18	27			GHz
Insertion Loss (Max.)	2.97	3.77	4.82			dB
VSWR (Max.)	1.3:1	1.3:1	1.3:1			
Power Handling (Max.)	29	20	14			Watts

#### Mechanical Specifications

##### Cable Assembly

Length	48 in [121.92 cm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]

##### Cable

Cable Type	PE-TC151
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Tape
Shield Layer 3	Silver Plated Copper Braid
Jacket Material	Polyurethane
Jacket Diameter	0.151 in [3.84 mm]

##### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Connection Method	Standard	Standard
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

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**Environmental Specifications**

**Temperature**

Operating Range

-65 to +90 deg C

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant

Yes

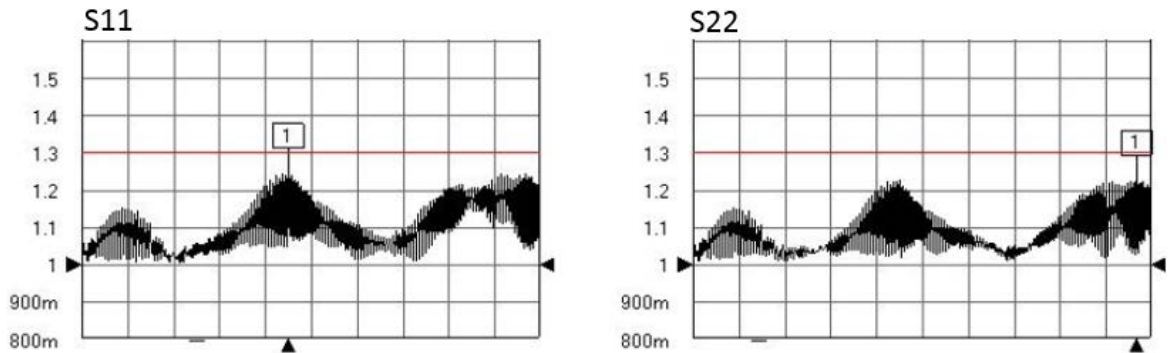
**Plotted and Other Data**

Notes:

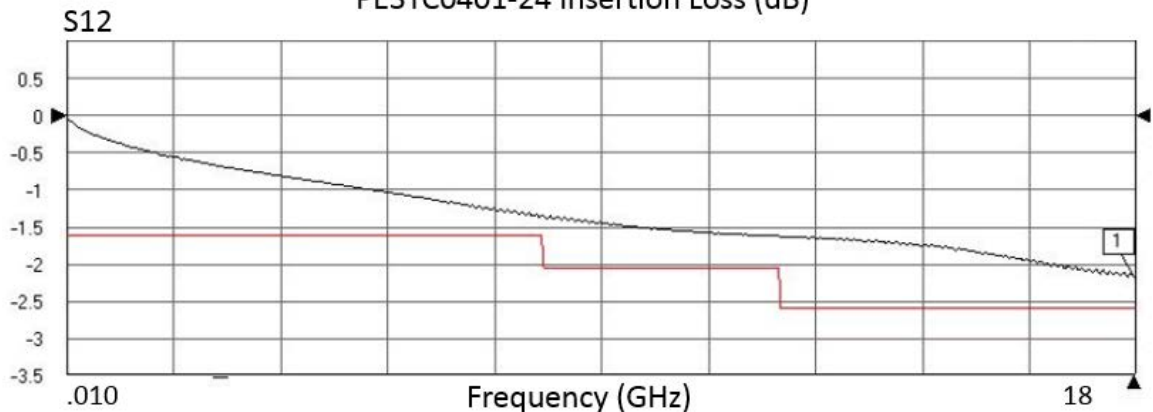
- Values at 25°C, sea level.

**Typical Performance Data**

PE3TC0401-24 VSWR



PE3TC0401-24 Insertion Loss (dB)



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**How to Order**

Part Number Configuration:

**PE3TC0401**

- **xx**

**uu**

Unit of Measure:  
 cm = Centimeters  
 <blank> = Inches  
 Length  
 Base Number

Example: PE3TC0401-12 = 12 inches long cable  
 PE3TC0401-100cm = 100 cm long cable

PE-TC151 Series Phase Stable Test Cable SMA Male to SMA Male to 27 GHz 48 Inch Length ,RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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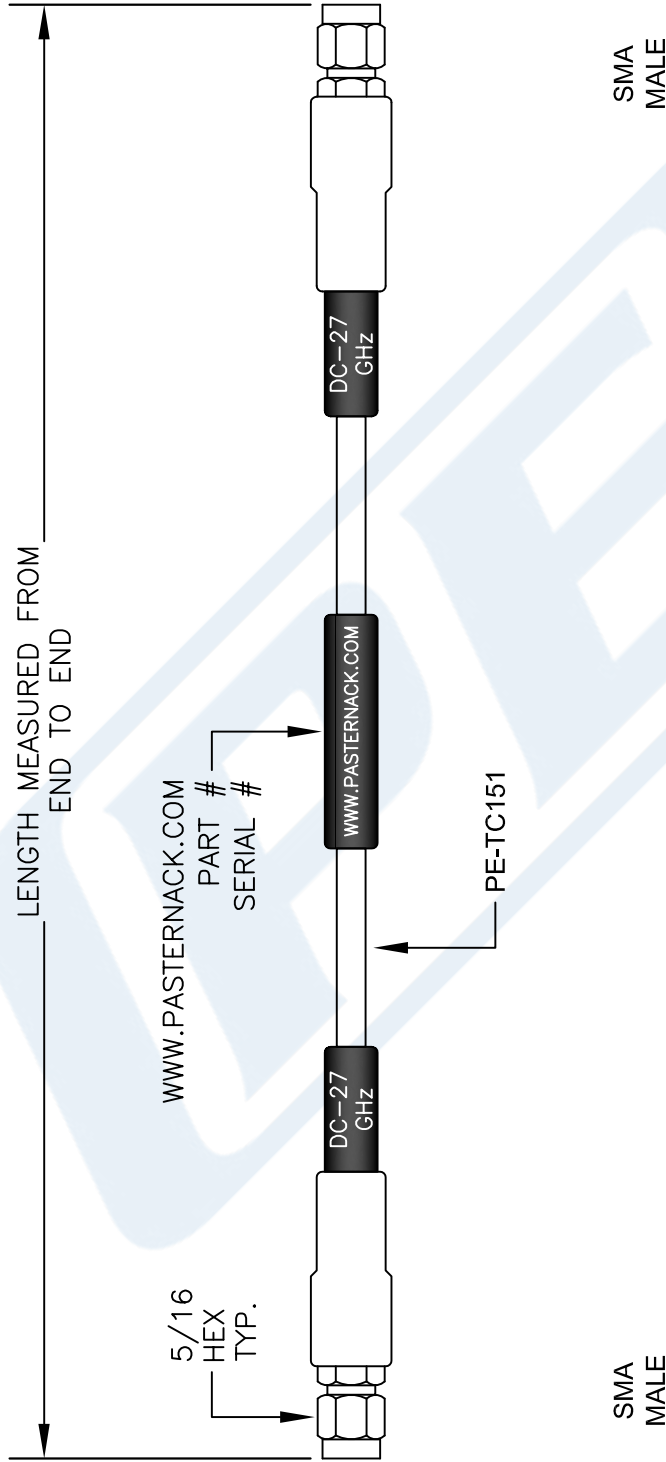
URL: <http://www.pasternack.com/sma-male-sma-male-.90-cable-assembly-pe3tc0401-48-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.



# PE3TC0401-48 CAD Drawing

PE-TC151 Series Phase Stable Test Cable SMA Male to  
SMA Male to 27 GHz 48 Inch Length ,RoHS



- NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
  3. DIMENSIONS ARE IN INCHES [mm].
  4. LENGTH TOLERANCE IS  $\pm 2\%$

DWG TITLE  
**PE3TC0401**

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 072215

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