



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

- Max Frequency 27 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Triple Shielded
- Polyurethane Jacket
- 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

- General Purpose
- Laboratory Use
- 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

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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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|------------------------------|---------|--------------|---------|--------------|
| Frequency Range | DC | | 27 | GHz |
| VSWR | | | 1.35:1 | |
| Velocity of Propagation | | 70 | | % |
| RF Shielding | 90 | | | dB |
| Capacitance | | 28.8 [94.49] | | pF/ft [pF/m] |
| Phase Stability with Flexure | | 5 | | Degrees |

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 | 1.35:1 | | | |
| Power Handling (Max.) | 29 | 20 | 14 | | | W |

Mechanical Specifications

Cable Assembly

| | |
|---------|---------------------|
| Length* | 48 in [121.92 cm] |
| Weight | 0.178 lbs [80.74 g] |

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] |

| | |
|------------------------------|--------------------|
| One Time Minimum Bend Radius | 0.75 in [19.05 mm] |
|------------------------------|--------------------|

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Connectors

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

Environmental Specifications

Temperature

Operating Range -65 to +90 deg C

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration:

PE3TC0401

- xx

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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 99.4% availability and are part of the broadest selection in the industry.

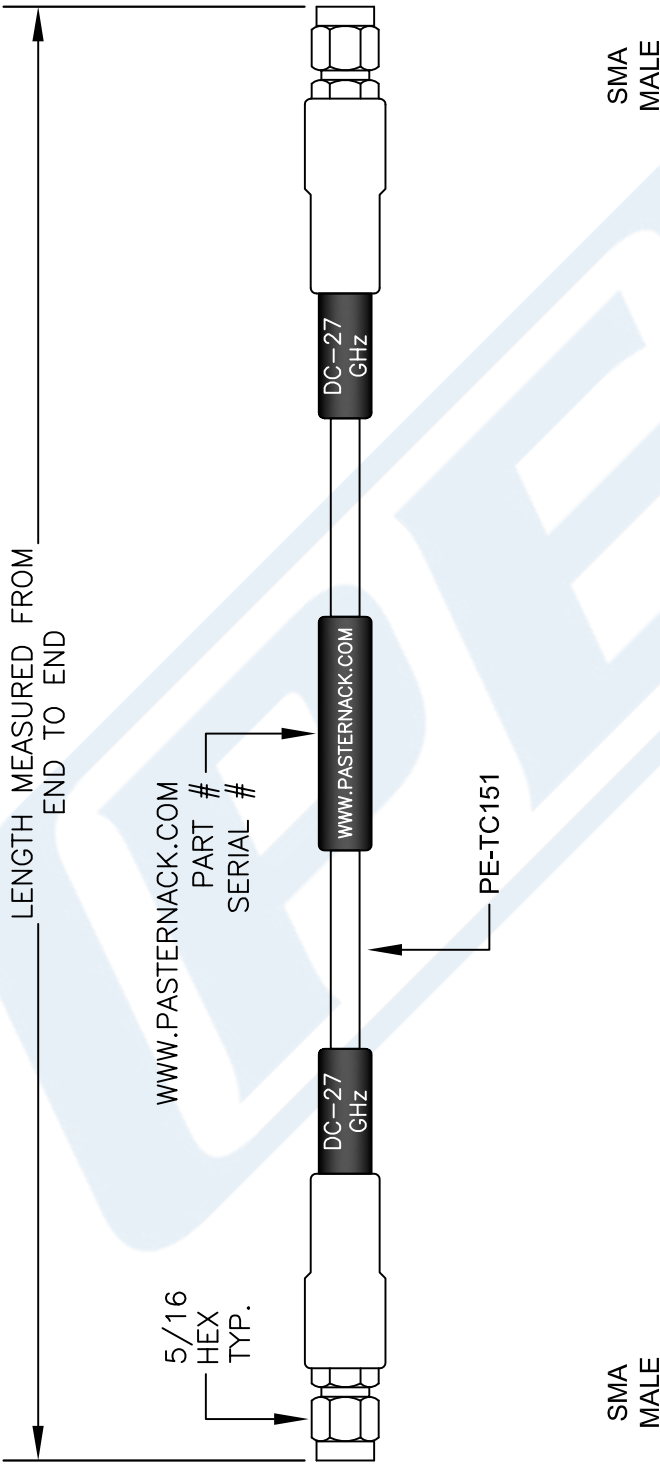
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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
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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

CAD FILE

072215

SCALE N/A

SIZE A

2233

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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