



PE-TC195 Series Phase Stable Test Cable SMA
Male to SMA Female to 18 GHz ,RoHS

RF Cable Assemblies Technical Data Sheet

PE3TC0102

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: PE-TC195

Features

- Phase and Amplitude stability with flexure
- Small Diameter Lighter weight lower profile for high density test applications
- Phase change with flexure $\pm 2^\circ$ to 18 GHz
- Excellent for multi-port test equipment
- Very flexible and durable cable with a min bend radius of 1 inch
- 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-TC195 series Test Cables are designed to allow customers to perform repeatable accurate measurements. Because these cables are phase stable under flexure, $\pm 2^\circ$ at 18 GHz, they are an excellent option for testing where movement will occur during testing. The PE-TC195 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-TC195 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		18	GHz
VSWR			1.25:1	
Velocity of Propagation		70		%
RF Shielding	100			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Phase Stability with Flexure		± 2		Degrees

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [PE-TC195 Series Phase Stable Test Cable SMA Male to SMA Female to 18 GHz ,RoHS PE3TC0102](#)



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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	3	12	18			GHz
Insertion Loss (Max.)	0.22	0.52	0.68			dB/ft
	[0.72]	[1.71]	[2.23]			[dB/m]
VSWR (Max.)	1.25:1	1.25:1	1.25:1			
Power Handling (Max.)			70			Watts

Mechanical Specifications

Cable Assembly

One Time Minimum Bend Radius 1 in [25.4 mm]

Cable

Cable Type PE-TC195
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 FEP
Jacket Diameter 0.195 in [4.95 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
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	
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

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Environmental Specifications

Temperature

Operating Range

-65 to +125 deg C

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant

Yes

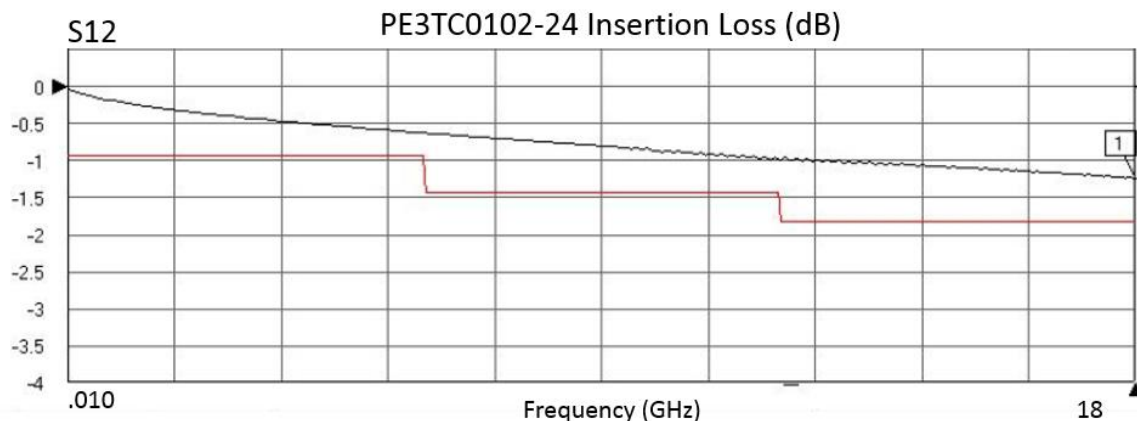
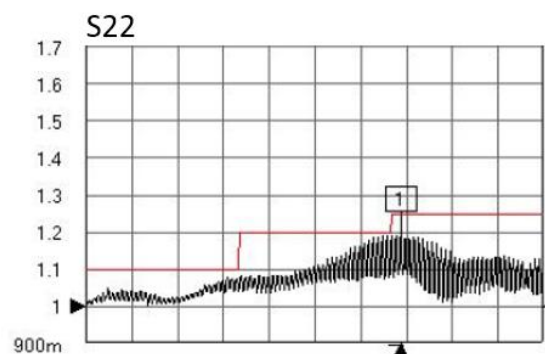
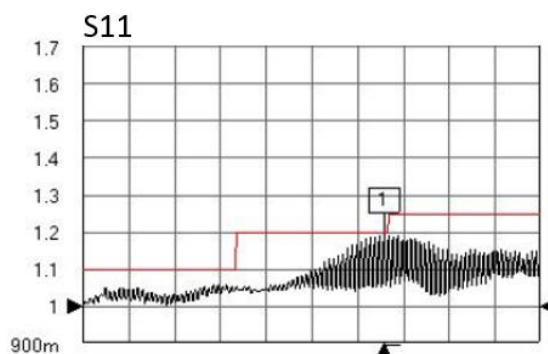
Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data

PE3TC0102-24 VSWR



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How to Order

Part Number Configuration:

PE3TC0102

- **xx**

uu

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

Example: PE3TC0102-12 = 12 inches long cable
PE3TC0102-100cm = 100 cm long cable

PE-TC195 Series Phase Stable Test Cable SMA Male to SMA Female to 18 GHz ,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.

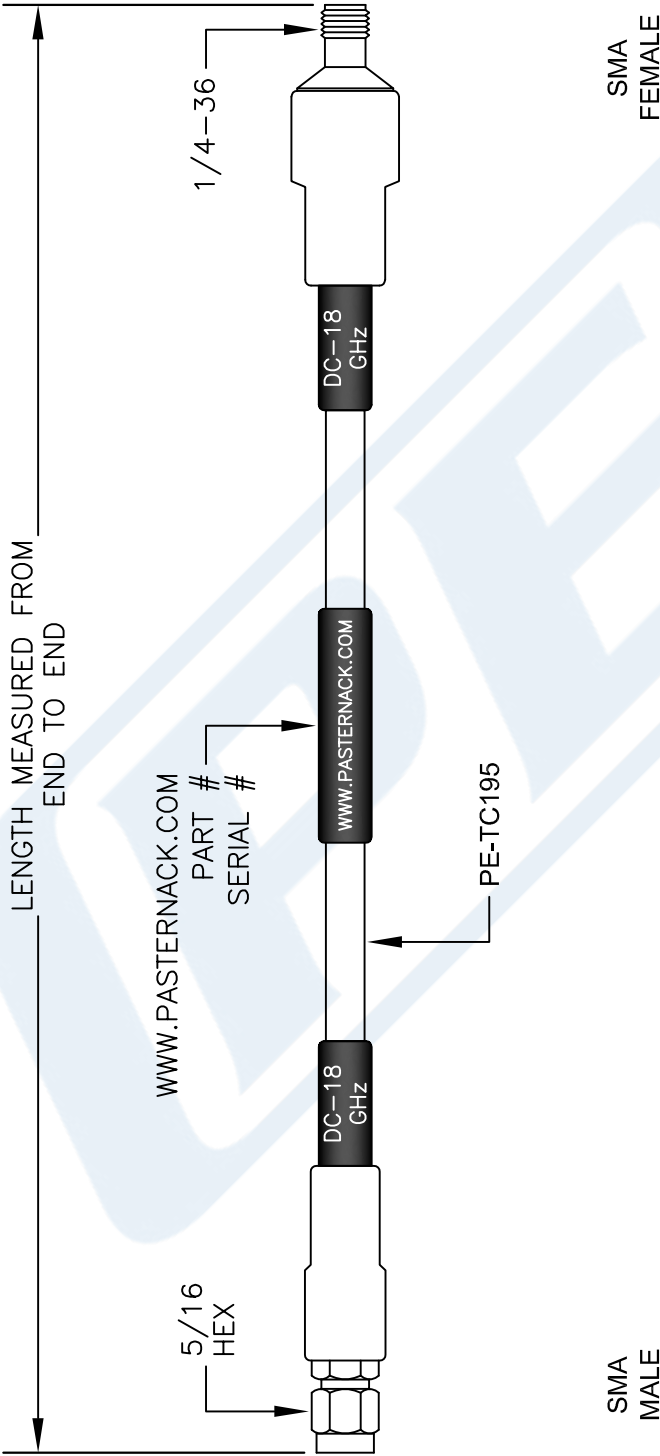
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [PE-TC195 Series Phase Stable Test Cable SMA Male to SMA Female to 18 GHz ,RoHS PE3TC0102](http://www.pasternack.com/sma-male-sma-female-.80-cable-assembly-pe3tc0102-p.aspx)

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PE3TC0102 CAD Drawing

PE-TC195 Series Phase Stable Test Cable SMA Male to SMA Female to 18 GHz ,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

PE3TC0102

FSCM NO. 53919

CAD FILE

072215

SCALE

SIZE

A

2233

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