PASTERNACK®
THE ENGINEER'S RF SOURCE

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

RF Cable Assemblies Technical Data Sheet PE3TC0104

Configuration

- Connector 1: N Male
- Connector 2: N 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 +/-2° 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 matted
- 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, +/- 2° 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 N Male to N Female to 18 GHz ,RoHS PE3TC0104

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

ISO 9001 : 2008 Registered

© 2015 Pasternack Enterprises All Rights Reserved

PASTERNACK®
THE ENGINEER'S RF SOURCE

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

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	N Male	N 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

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 N Male to N Female to 18 GHz ,RoHS PE3TC0104

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

ISO 9001 : 2008 Registered

© 2015 Pasternack Enterprises All Rights Reserved

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

Environmental Specifications

Temperature

Operating Range	-65 to +125 deg C

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

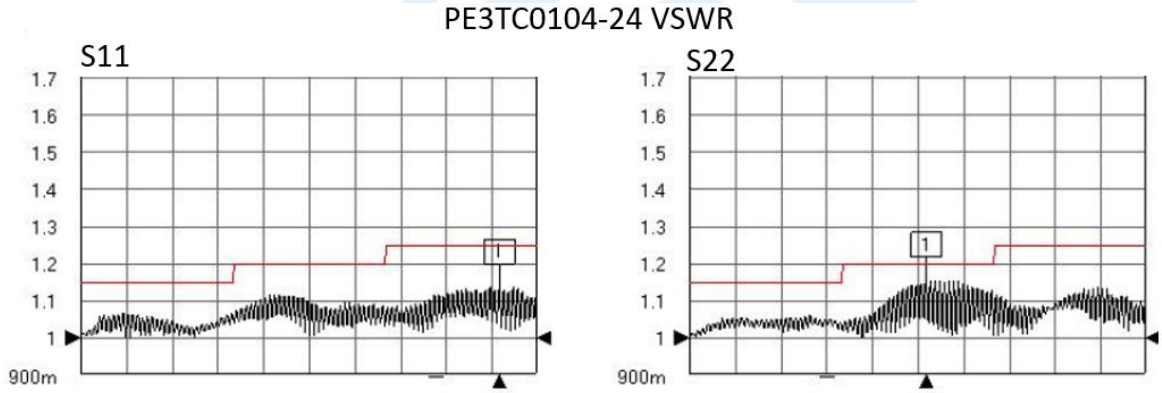
RoHS Compliant	Yes

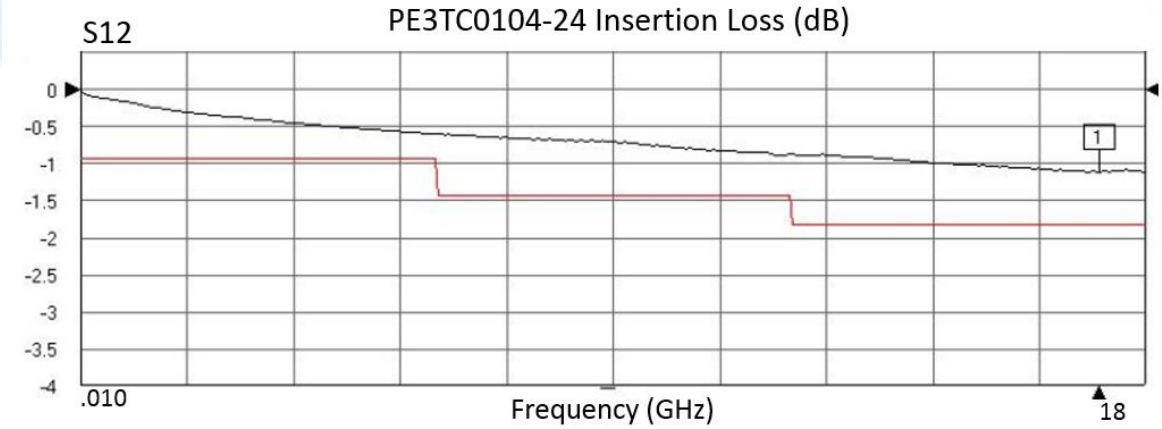
Plotted and Other Data

Notes:

- Values at 25°C, sea level.

Typical Performance Data





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 N Male to N Female to 18 GHz ,RoHS PE3TC0104

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

ISO 9001 : 2008 Registered

© 2015 Pasternack Enterprises All Rights Reserved

PASTERNACK®
THE ENGINEER'S RF SOURCE

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

How to Order

Part Number Configuration: **PE3TC0104 - xx uu**

- **uu** — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- **xx** — Length
- **PE3TC0104** — Base Number

Example: PE3TC0104-12 = 12 inches long cable
PE3TC0104-100cm = 100 cm long cable

PE-TC195 Series Phase Stable Test Cable N Male to N 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 N Male to N Female to 18 GHz ,RoHS PE3TC0104

URL: http://www.pasternack.com/n-male-n-female-.80-cable-assembly-pe3tc0104-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.

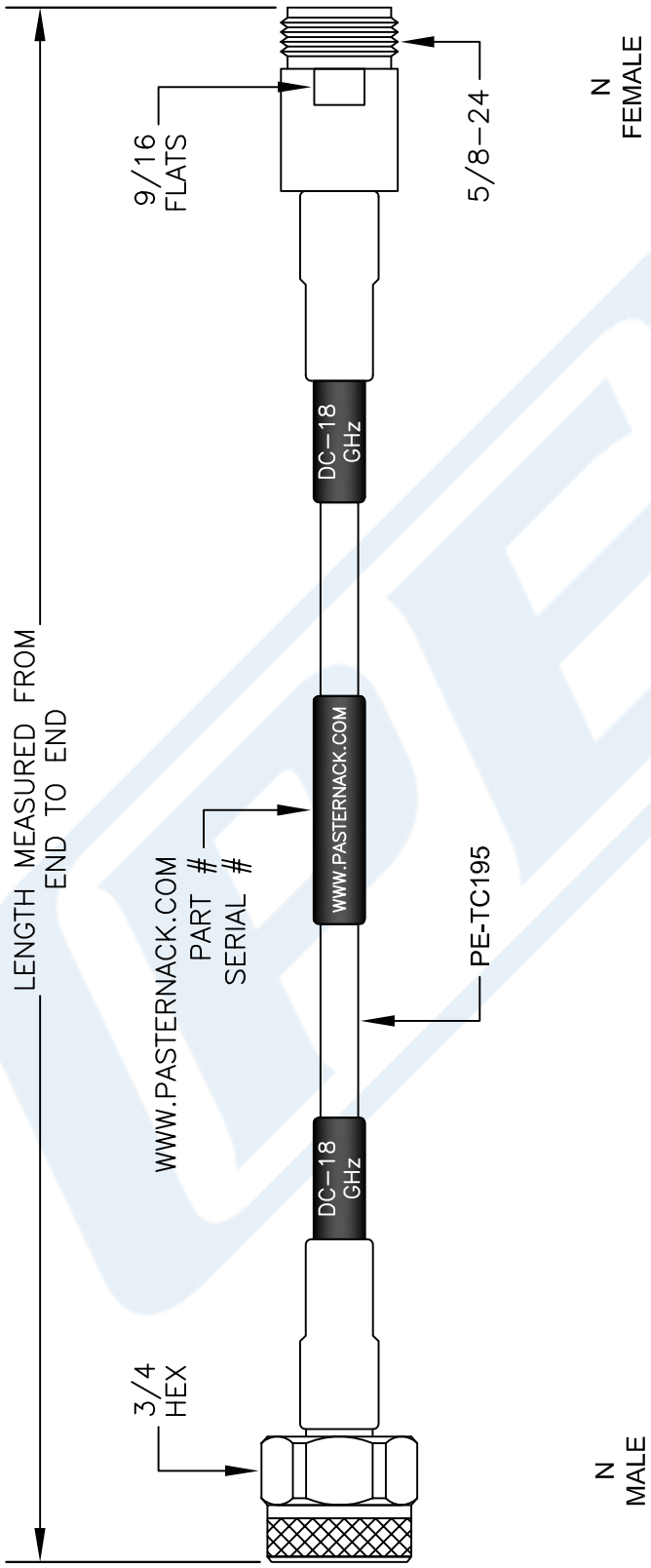
Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

ISO 9001 : 2008 Registered

© 2015 Pasternack Enterprises All Rights Reserved

PE3TC0104 CAD Drawing

PE-TC195 Series Phase Stable Test Cable N Male to N 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 ± 2%

DWG TITLE
PE3TC0104

FSCM NO. 53919

CAD FILE 072215 | SCALE N/A | SIZE A | 2233

PASTERNACK®
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
Website: www.pasternack.com | **E-Mail:** sales@pasternack.com

© 2015 Pasternack Enterprises All Rights Reserved