PASTERNACK
an INFINITE brand

N Male to SMA Male Low Loss Cable Using PE-P142LL Coax with HeatShrink

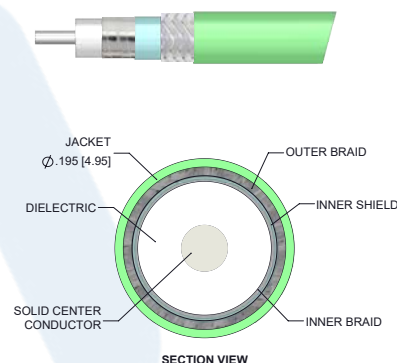## RF Cable Assemblies Technical Data Sheet — PE3C0253

Configuration
- Connector 1: N Male
- Connector 2: SMA Male
- Cable Type: PE-P142LL

Features
- Max Frequency 18 GHz
- 80% Phase Velocity
- Triple Shielded
- Passivated Stainless Steel Jacket
- Type N Male to N Male and SMA Male to SMA Male Configurations Available
- Robust Connector/Armor Interface
- Low Loss Flexible Armored PE-P142LL Coax with Expanded PTFE Tape Dielectric
- Custom lengths available, call for pricing and lead time

JACKET ∅ .195 [4.95]

OUTER BRAID

DIELECTRIC

INNER SHIELD

SOLID CENTER CONDUCTOR

INNER BRAID

SECTION VIEW

Applications
- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0253 type N male to SMA male cable using PE-P142LL 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 type N to SMA cable assembly has a male to male gender configuration with 50 ohm flexible PE-P142LL coax. The PE3C0253 type N male to SMA male cable assembly operates to 18 GHz. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness. The durable stainless steel type N and SMA connectors and passivated stainless steel jacket of this cable assembly make it ideal anywhere a more rugged assembly is required.

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.

PE3C0253 REV 1.0

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RF Cable Assemblies Technical Data Sheet   PE3C0253

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR		1.25:1	1.35:1	
Velocity of Propagation		80		%

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	5	10	18	GHz
Insertion Loss (Typ.)	0.08	0.14	0.18	0.25	0.36	dB/ft
	0.26	0.46	0.59	0.82	1.18	dB/m
Power Handling (Max.)				220		W

Electrical Specification Notes:
Insertion loss does not include the loss of the connectors.
Insertion loss is estimated as 0.05 x sqrt(fGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Cable
Cable Type	PE-P142LL
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	Aluminum Polyester
Shield Layer 3	Silver Plated Copper Braid
Jacket Material	Passivated Stainless Steel
Jacket Diameter	0.32 in [8.13 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: N Male to SMA Male Low Loss Cable Using PE-P142LL Coax with HeatShrink PE3C0253

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Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
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   -55 to +200 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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RF Cable Assemblies Technical Data Sheet   PE3C0253

How to Order

Part Number Configuration: **PE3C0253**   **- xx**   **uu**

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

Example: PE3C0253-12 = 12 inches long cable
PE3C0253-100cm = 100 cm long cable

N Male to SMA Male Low Loss Cable Using PE-P142LL Coax with HeatShrink 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: N Male to SMA Male Low Loss Cable Using PE-P142LL Coax with HeatShrink PE3C0253
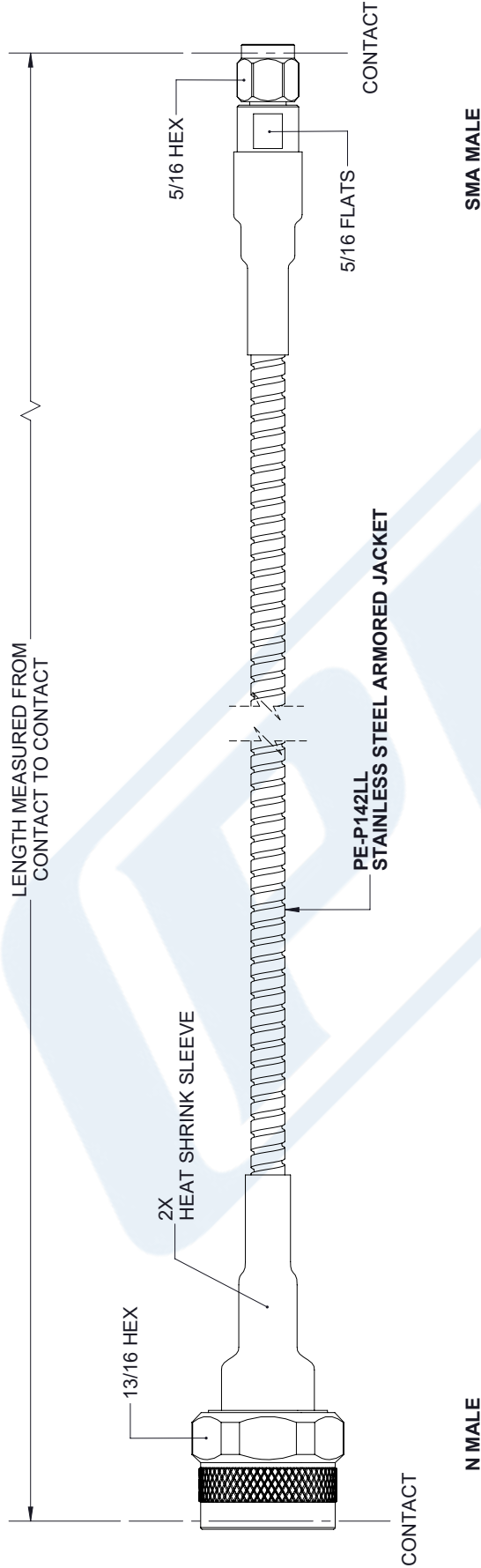
URL: https://www.pasternack.com/n-male-sma-male-pe-p142ll-cable-assembly-pe3c0253-p.aspx

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.

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PE3C0253 CAD Drawing
N Male to SMA Male Low Loss Cable Using PE-P142LL Coax with HeatShrink

CONTACT

5/16 HEX

5/16 FLATS

SMA MALE

LENGTH MEASURED FROM CONTACT TO CONTACT

PE-P142LL
STAINLESS STEEL ARMORED JACKET

2X
HEAT SHRINK SLEEVE

13/16 HEX

N MALE

CONTACT

T-Rev.D