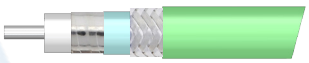
PASTERNACK
an INFINITE brand

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

RF Cable Assemblies Technical Data Sheet PE3C0689/SP

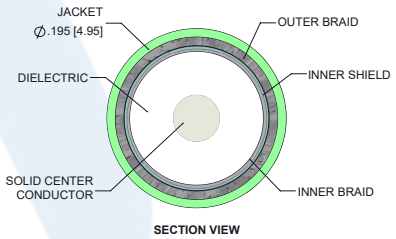
Configuration

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



Features

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- Maximum VSWR is < 1.35:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125 °C
- RoHS and REACH Compliant
- Same day shipment and customs lengths
- 100% Continuity, Hi-Pot, and RF tested



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0689/SP SMA male to type N 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 SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible PE-P142LL coax. The PE3C0689/SP SMA male to type N male cable assembly operates to 18 GHz. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 95 dB. The PE3C0689 series high performance test cable's 0.195 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All PE3C0689 cable assemblies are 100% Continuity, Hi-POT, and RF tested to published specifications. Custom lengths are built to order and shipped same day.

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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SMA Male to N Male Low Loss Cable Using PE-P142LL Coax PE3C0689/SP

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

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.082	0.118	0.178	0.257	0.376	dB/ft
	0.27	0.39	0.58	0.84	1.23	dB/m

Electrical Specification Notes:
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.05 xSQRt(FGHz) db max for N Male connector and 0.04 xSQRt(FGHz) db max for SMA Male connector.

Mechanical Specifications

Cable Assembly

Weight	0.116 lbs [52.62 g]

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 Tape
Shield Layer 2	Aluminum Polyester
Shield Layer 3	Silver Plated Copper Wire
Jacket Material	FEP, Green
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM-B488 50µ In. Min	ASTM-B488, 50µ in. minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Passivated Stainless Steel
Outer Conductor Plating Specification		SAE-AMS-2700
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 Inch	3/4 Inch
Torque	8 in-lbs [0.9 Nm]	14 in-lbs [1.58 Nm]

Environmental Specifications

Temperature

Operating Range -55 to +165 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: **PE3C0689/SP - xx uu**

- uu — Unit of Measure: cm = Centimeters, <blank> = Inches
- xx — Length
- PE3C0689/SP — Base Number

Example: PE3C0689/SP-12 = 12 inches long cable
PE3C0689/SP-100cm = 100 cm long cable

SMA Male to N Male Low Loss Cable Using PE-P142LL Coax 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: SMA Male to N Male Low Loss Cable Using PE-P142LL Coax PE3C0689/SP

URL: https://www.pasternack.com/sma-male-to-n-male-low-loss-cable-using-pe-p142ll-pe3c0689-sp-p.aspx

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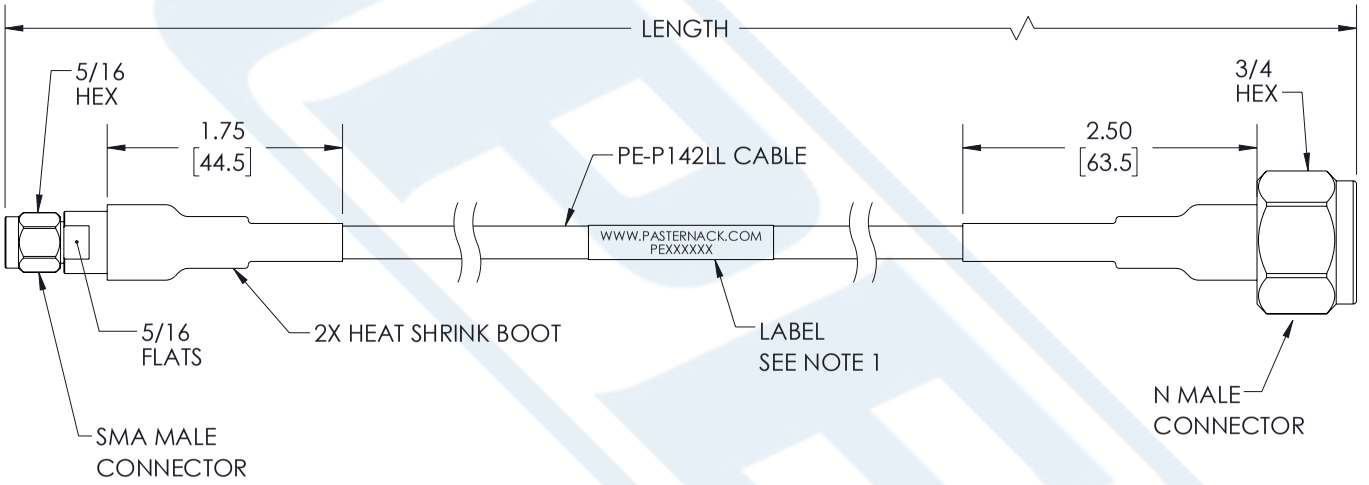
PE3C0689/SP CAD Drawing

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

REVISION					
ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	12/14/2022		AGANWANI



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS , ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5]
.XX = ±.02 [.5]
.XXX = ±.005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

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Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

DESCRIPTION: SMA Male to N Male Low Loss Cable Using PE-P142LL Coax

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3C0689/SP	A

PE3C0689/SP REV 1.0

T-Rev.D