SMA Male to SMA Male Cable 100 cm Length Using PE-141FLX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet   PE3CA1035-100CM

Configuration
- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-141FLEX

Features
- Max Frequency 26.5 GHz
- Shielding Effectivity > 90 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles
- Design operates to 26.5 GHz
- Shielding effectivity > 90dB
- One time minimum bend radius: 0.4 inch
- Typical SMA VSWR 1.21:1 to 26.5 GHz

PE-141FLEX

0.163 Ø [4.1]

JACKET
OUTER SHIELD
INNER SHIELD
DIELECTRIC
SOLID CENTER CONDUCTOR
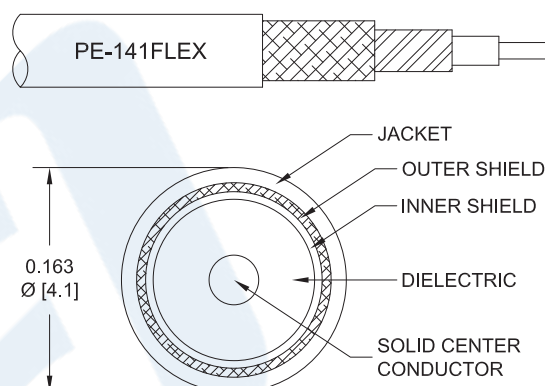
Applications
- General Purpose
- Laboratory Use
- High Performance RF equipment interconnect
- Flexible in cabinet or in the rack requirements
- Inside the box RF routing
- General purpose lighter duty lab use

Description

Pasternack's PE3CA1035-100CM SMA male to SMA male 100 cm cable using PE-141FLX 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible PE-141FLEX coax. The PE3CA1035-100CM SMA male to SMA male cable assembly operates to 26.5 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB. These new high performance flexible cables are made using our PE-141FLEX coax and our new low profile connectors. The high performance flexible design is well suited for connecting RF devices in rack-mount systems, inside RF equipment and for general lab hookup where a more expensive test cable is not required. These cables are similar to the PE30X series which have retractable coupling nuts and thick wall SMA connectors. The heavier duty PE35X test series cables have similar performance, but include a heavy duty strain relief mechanism and extra booting material as well as a thick wall SMA connector to increase the ruggedness of the PE35X cables for use in more demanding test environments.

PE-141FLEX is a flexible cable alternate to Semi Rigid coax and has a solid PTFE resulting in a 69.5% phase velocity. The smooth wall formed by the Braid over Spiral Ribbon design allows for a flexible cable that has similar performance to a solid wall 141 Semi Rigid (RG402) cable.

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 SMA Male Cable 100 cm Length Using PE-141FLX Coax , LF Solder PE3CA1035-100CM

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		26.5	GHz
VSWR			1.4:1	
Return Loss			15.56	dB
Velocity of Propagation		69.5		%
RF Shielding	90			dB
Group Delay		1.44 [4.72]		ns/ft [ns/m]
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			250	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	3	6	12	18	26.5	GHz
Insertion Loss (Max.)	0.94	1.38	2.06	2.63	3.3	dB
VSWR (Max.)	1.08:1	1.12:1	1.2:1	1.3:1	1.4:1	
Power Handling (Max.)	215	150	105	88	75	W

Mechanical Specifications

Cable Assembly
Length*   39.37 in [100 cm]

Weight   0.128 lbs [58.06 g]

Cable
Cable Type   PE-141FLEX
Impedance   50 Ohms
Inner Conductor Type   Solid
Inner Conductor Material and Plating   Copper Clad Steel, Silver
Dielectric Type   PTFE
Number of Shields   2
Shield Layer 1   Silver Plated Copper Tape
Shield Layer 2   Silver Plated Copper Braid
Outer Conductor 1 Material and Plating   Silver Plated Copper Tape
Outer Conductor 2 Material and Plating   Silver Plated Copper Braid
Jacket Material   FEP
Jacket Diameter   0.163 in [4.14 mm]

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One Time Minimum Bend Radius	0.4 in [10.16 mm]
Repeated Minimum Bend Radius	1.58 in [40.13 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Stainless Steel, Gold	Stainless Steel, Gold
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Hex Size	5/16 Inch	5/16 Inch

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Environmental Specifications
Temperature
Operating Range   -40 to +150 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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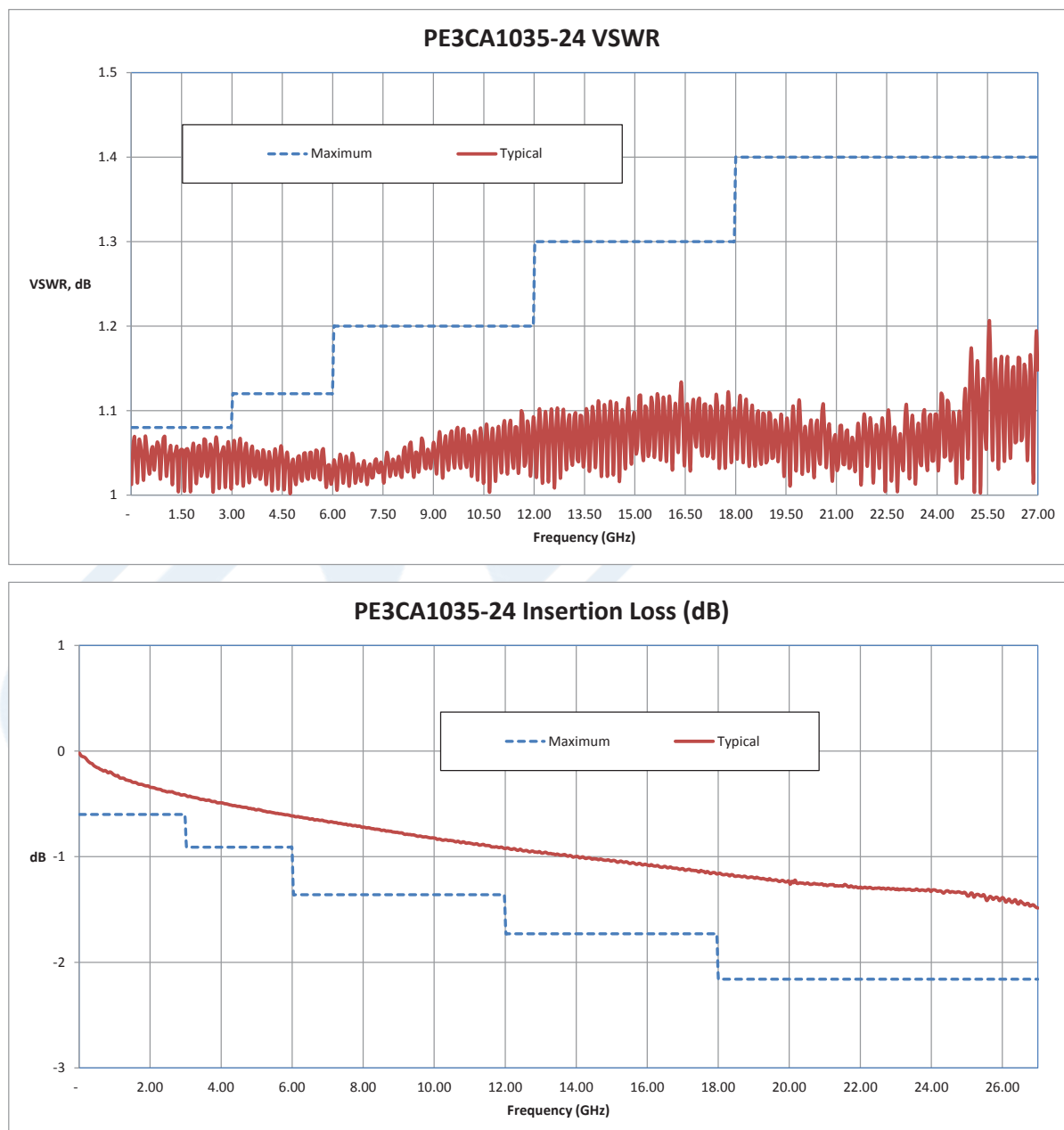

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com

PE3CA1035-100CM REV 1.2

SMA Male to SMA Male Cable 100 cm Length
Using PE-141FLX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet   PE3CA1035-100CM

Typical Performance Data

PE3CA1035-24 VSWR

VSWR, dB — Frequency (GHz) — Maximum / Typical

PE3CA1035-24 Insertion Loss (dB)

dB — Frequency (GHz) — Maximum / Typical

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RF Cable Assemblies Technical Data Sheet   PE3CA1035-100CM

How to Order

Part Number Configuration: **PE3CA1035   - xx   uu**

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

Example: PE3CA1035-12 = 12 inches long cable
             PE3CA1035-100cm = 100 cm long cable

SMA Male to SMA Male Cable 100 cm Length Using PE-141FLX Coax , LF Solder 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.
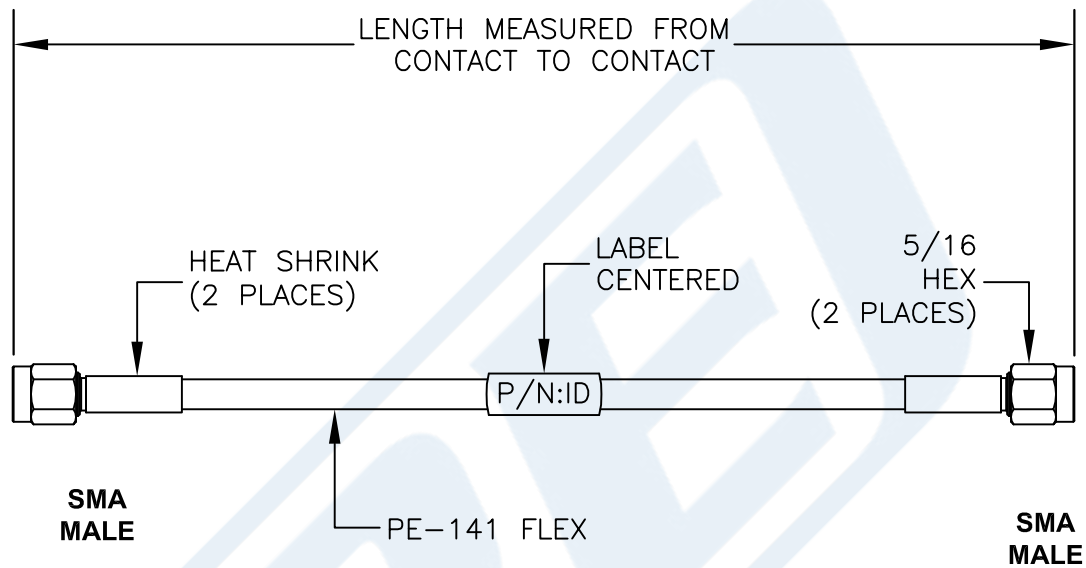
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URL: https://www.pasternack.com/sma-male-sma-male-pe-141flex-cable-assembly-pe3ca1035-100cm-p.aspx

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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PE3CA1035-100CM CAD Drawing
SMA Male to SMA Male Cable 100 cm Length Using PE-141FLX Coax , LF Solder

LENGTH MEASURED FROM
CONTACT TO CONTACT

HEAT SHRINK
(2 PLACES)

LABEL
CENTERED

5/16
HEX
(2 PLACES)

P/N:ID

SMA
MALE

PE-141 FLEX

SMA
MALE

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 ± 1.5% OR 3/8", WHICHEVER IS GREATER.

DWG TITLE		FSCM NO. 53919		
PE3CA1035				
CAD FILE	032715	SCALE N/A	SIZE A	150

PE3CA1035-100CM REV 1.2