



SMA Male to SMA Male Cable 50 cm Length Using PE-086FLEX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3CA1039-50CM

Configuration

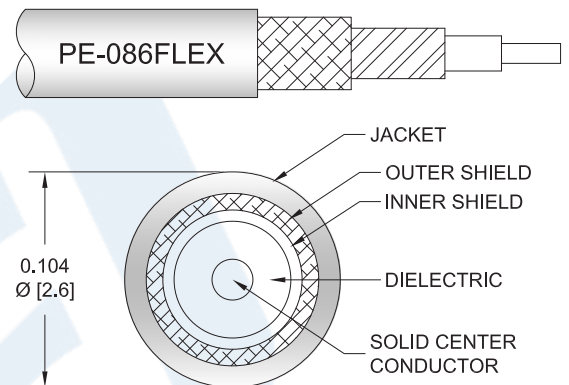
- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-086FLEX

Features

- Max Frequency 26.5 GHz
- Shielding Effectivity > 90 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use



Description

Pasternack's PE3CA1039-50CM SMA male to SMA male 50 cm cable using PE-086FLEX 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-086FLEX coax. The PE3CA1039-50CM 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.

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 50 cm Length Using PE-086FLEX Coax , LF Solder PE3CA1039-50CM](#)



SMA Male to SMA Male Cable 50 cm Length
Using PE-086FLEX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3CA1039-50CM

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.) | 0.88 | 1.27 | 1.83 | 2.28 | 2.8 | dB |
| VSWR (Max.) | 1.08:1 | 1.12:1 | 1.2:1 | 1.3:1 | 1.4:1 | |
| Power Handling (Max.) | 81 | 50 | 40 | 33 | 26 | W |

Mechanical Specifications

Cable Assembly

Length* 19.69 in [500.13 mm]

Weight 0.0445 lbs [20.18 g]

Cable

Cable Type PE-086FLEX
 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 0.104 in [2.64 mm]

One Time Minimum Bend Radius 0.24 in [6.1 mm]

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 50 cm Length Using PE-086FLEX Coax , LF Solder PE3CA1039-50CM](#)



SMA Male to SMA Male Cable 50 cm Length
Using PE-086FLEX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3CA1039-50CM

Repeated Minimum Bend Radius 0.79 in [20.07 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 |

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.

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 50 cm Length Using PE-086FLEX Coax , LF Solder PE3CA1039-50CM](#)

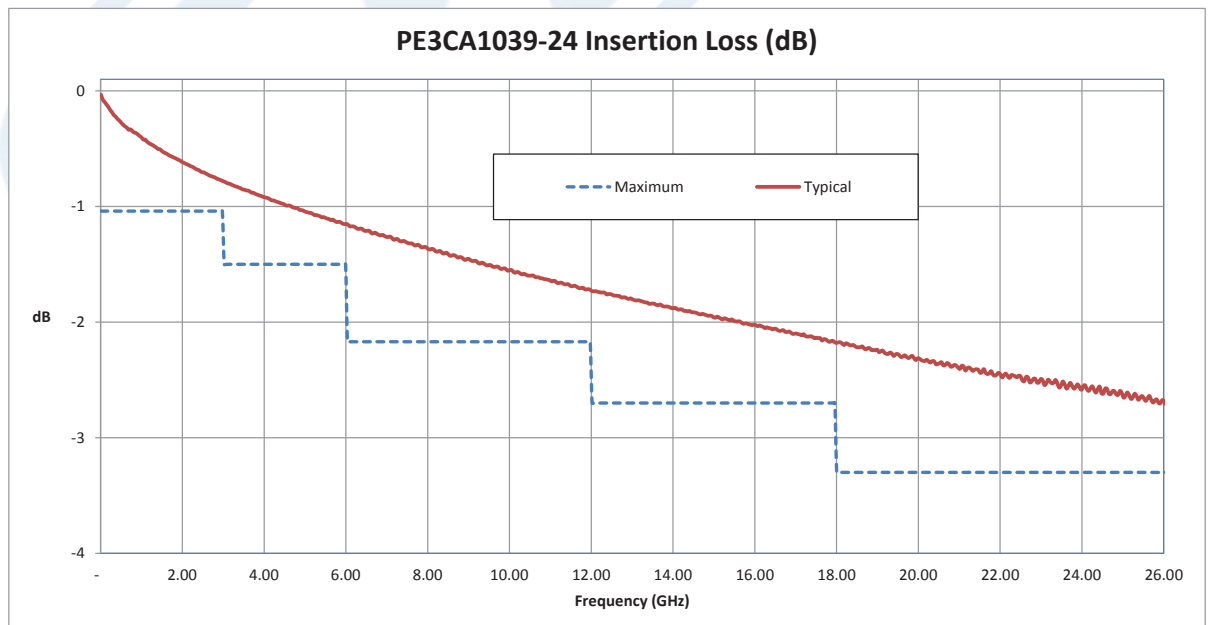
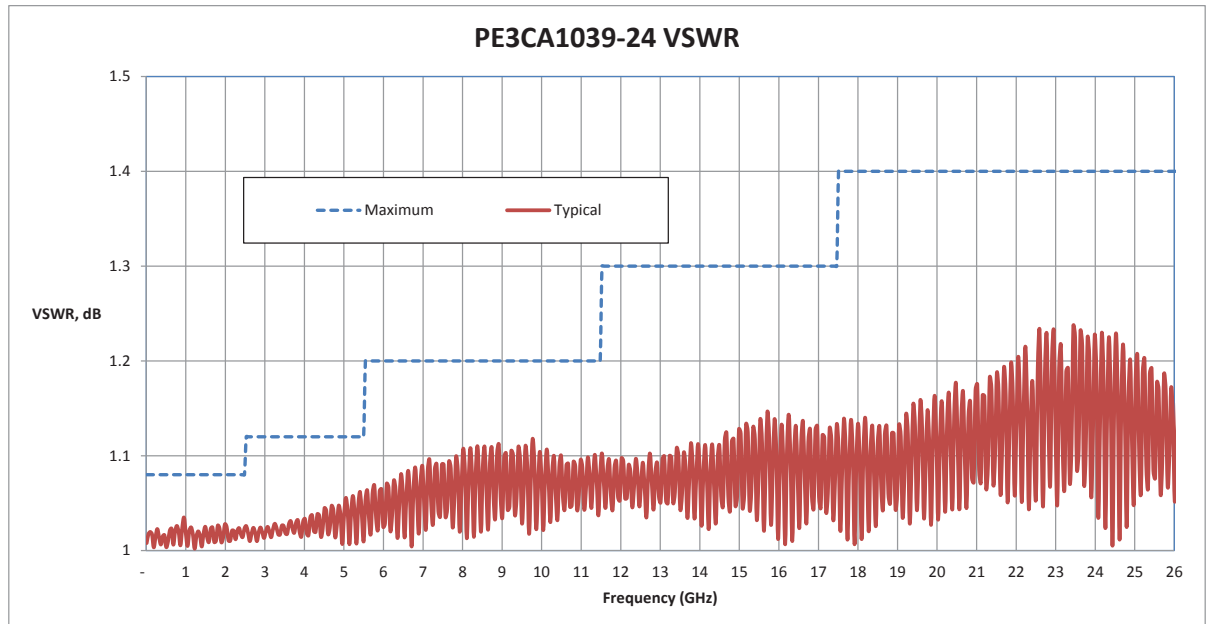


SMA Male to SMA Male Cable 50 cm Length
Using PE-086FLEX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3CA1039-50CM

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: [SMA Male to SMA Male Cable 50 cm Length Using PE-086FLEX Coax , LF Solder PE3CA1039-50CM](#)



SMA Male to SMA Male Cable 50 cm Length Using PE-086FLEX Coax , LF Solder

RF Cable Assemblies Technical Data Sheet

PE3CA1039-50CM

How to Order

Part Number Configuration:

PE3CA1039

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3CA1039-12 = 12 inches long cable
PE3CA1039-100cm = 100 cm long cable

SMA Male to SMA Male Cable 50 cm Length Using PE-086FLEX 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.

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 50 cm Length Using PE-086FLEX Coax , LF Solder PE3CA1039-50CM](https://www.pasternack.com/sma-male-sma-male-pe-086flex-cable-assembly-pe3ca1039-50cm-p.aspx)

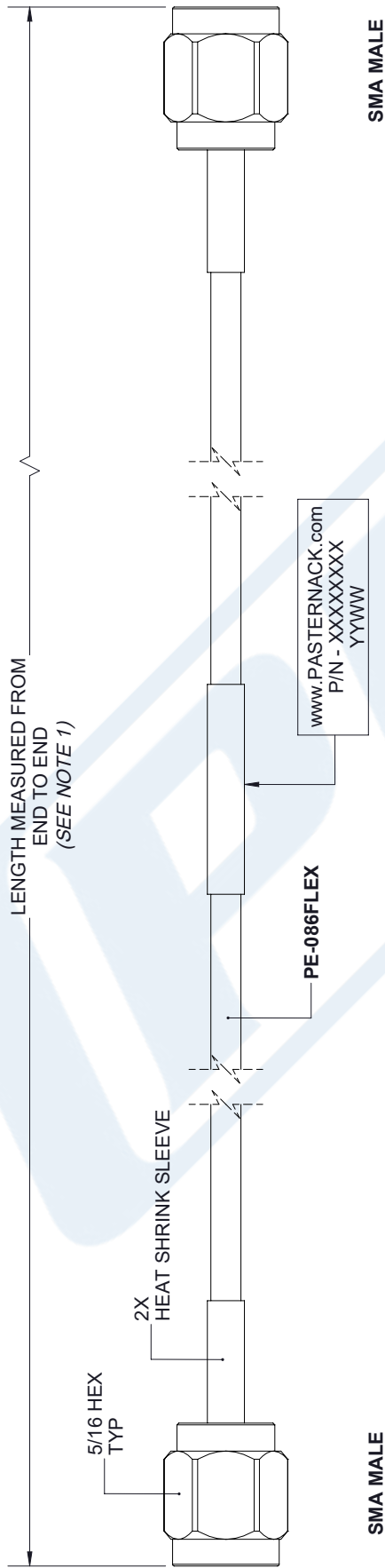
URL: <https://www.pasternack.com/sma-male-sma-male-pe-086flex-cable-assembly-pe3ca1039-50cm-p.aspx>

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.

PE3CA1039-50CM CAD Drawing

SMA Male to SMA Male Cable 50 cm Length Using PE-086FLEX Coax , LF Solder

| REVISIONS | | |
|-----------|-----------------|-----------|
| REV. | DESCRIPTION | DATE |
| A | INITIAL RELEASE | 4/21/2020 |
| | | APPROVED |
| | | S. ELLIS |



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

TOLERANCES:

| | | |
|--------------|--------|-------------|
| .X = ±.2 | [5.08] | FRACTIONS |
| .XX = ±.02 | [.51] | ± 1/32 |
| .XXX = ±.005 | [.13] | ANGLES ± 1° |

CABLE LENGTH (L) TOLERANCES:

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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

Pasternack Enterprises, Inc.
 P. O. Box 16759, Irvine, CA 92623.
 Phone: 1.949.261.1920 | 1.866.727.8376
 Fax: 1.949.261.7451
 Website: www.pasternack.com
 E-mail: sales@pasternack.com

| | | | |
|------|-----------|----------|-----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | K. DANG | PE3CA1039 |
| REV | | | A |

- NOTES:**
- CABLE LENGTH (L) TOLERANCES: ± 2% L.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.