

## SMA Male Connector Crimp/Solder (Captive Contact) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



### PE4589

#### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4589 , SMA, Standard, Connector is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 3 GHz and offers good VSWR of 1.3:1.

Our SMA male connector PE4589 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

| Description            | Minimum | Typical | Maximum | Units |
|------------------------|---------|---------|---------|-------|
| Frequency Range        | DC      |         | 3       | GHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |
| Impedance              |         | 50      |         | Ohms  |

#### Mechanical Specifications

##### Size

|               |                                   |
|---------------|-----------------------------------|
| Length        | 1.06 in [26.92 mm]                |
| Width         | 0.312 in [7.92 mm]                |
| Weight        | 0.018 lbs [8.16 g]                |
| Mating Torque | 3 to 5 in-lbs [[0.34 to 0.57 Nm]] |

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## PE4589

### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>50 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>100 µin minimum |

### Environmental Specifications

#### Temperature

Operating Range -65 to +165 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

SMA Male Connector Crimp/Solder (Captive Contact) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch 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.

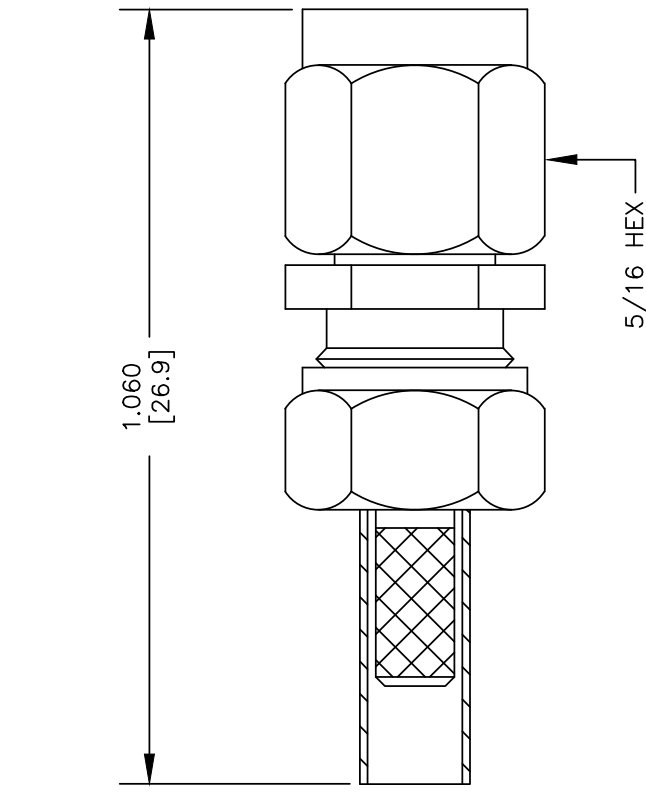
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder \(Captive Contact\) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4589](#)

URL: <https://www.pasternack.com/sma-male-standard-rg174-rg316-rg188-connector-pe4589-p.aspx>

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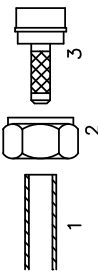
PE4589 CAD Drawing

SMA Male Connector Crimp/Solder (Captive Contact) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



STRIPPING DIMENSIONS  
ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. SO NOT NICK THE CENTER CONDUCTOR. TIN CENTER CONDUCTOR.
2. SLIDE FERRULE (1) & CLAMP NUT (2) OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY (3) UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR. SLIDE FERRULE (1) OVER BRAID & AGAINST CLAMP NUT. CRIMP FERRULE (1)
3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



CRIMP SIZE REQUIRED

CONTACT: SOLDER  
FERRULE: .128" HEX CRIMP TOOL



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

DWG TITLE

PE4589

FSCM NO. 53919

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. FITS MIL-C-17 AND EQUIVALENT CABLES.

CAD FILE 120804

SCALE N/A

SIZE A

XXXX

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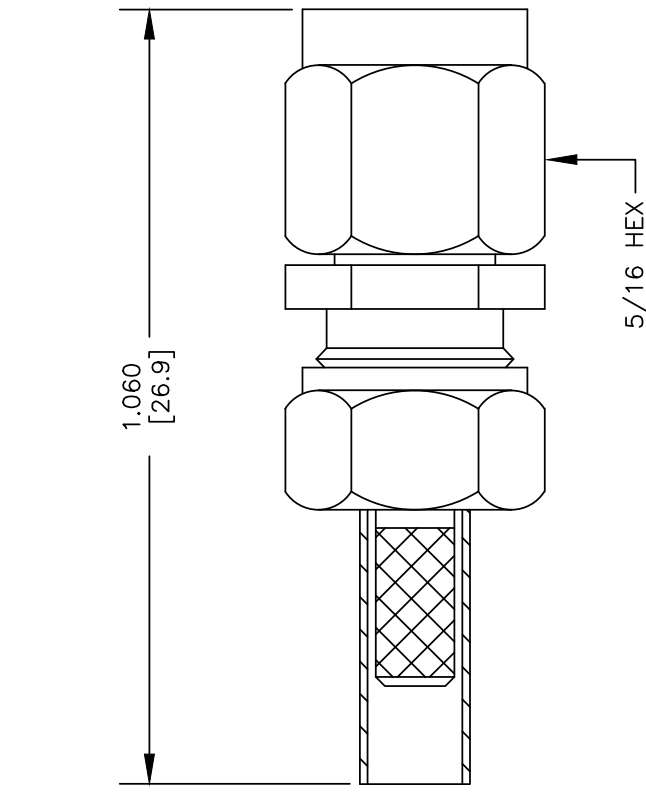
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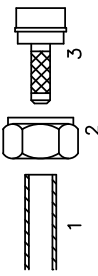
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CAD FILE 120804

SCALE N/A

SIZE A

XXXX



## LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax

### RF Cables Technical Data Sheet



**LMR-100A-UF**

#### Times Microwave Systems Coax Cable Specification Configuration

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

#### Features

- Ultra Flexible Coax with Stranded Center Conductor
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 66% VoP
- Max Operating Temperature +85°C
- TPE Jacket
- Min Install Bend Radius of 0.25 inches

#### Applications

- RF Test Systems
- Laboratory Applications
- Jumper Assemblies
- Antenna Installs
- General Purpose RF Interconnect

#### Description

LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax from Times Microwave is part of the large product offering by Pasternack of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Pasternack LMR-100-UF coax cable is manufactured in an ultra flexible design and has a 50 Ohm impedance. This low loss and ultra flexible 50 Ohm coax cable LMR-100-UF is constructed with a 0.110 inch diameter and Black TPE jacket.

LMR-100-UF flexible 50 Ohm coax cable with TPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.110 inch diameter and low loss ultra flexible coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-100-UF TPE coax is constructed with PE dielectric and a maximum operating temperature of 85 degrees C. Pasternack's offering of LMR-100-UF coax cable provides specs for this wire on its RF coax cable LMR-100-UF datasheet.

LMR-100-UF cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss ultra flexible LMR-100-UF coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

\* LMR™ is a trademark of Times Microwave Systems.

#### Electrical Specifications

| Description                          | Minimum | Typical     | Maximum | Units        |
|--------------------------------------|---------|-------------|---------|--------------|
| Frequency Range                      | DC      |             | 5.8     | GHz          |
| Impedance                            |         | 50          |         | Ohms         |
| Velocity of Propagation              |         | 66          |         | %            |
| Time Delay                           |         | 1.54 [5.05] |         | ns/ft [ns/m] |
| Shielding Effectiveness              | 90      |             |         | dB           |
| Dielectric Withstanding Voltage (DC) |         |             | 500     | Vdc          |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax LMR-100A-UF](#)



## LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax

### RF Cables Technical Data Sheet



### LMR-100A-UF

|                               |               |              |
|-------------------------------|---------------|--------------|
| Jacket Spark                  | 2,000         | Vrms         |
| Inner Conductor DC Resistance | 81            | Ohms/1000ft  |
| Outer Conductor DC Resistance | 9.5           | Ohms/1000ft  |
| Nominal Capacitance           | 30.8 [101.05] | pF/ft [pF/m] |
| Nominal Inductance            | 0.077 [0.25]  | uH/ft [uH/m] |
| Input Power (Peak)            | 600           | Watts        |

#### Performance by Frequency Band

| Description           | F1    | F2   | F3    | F4    | F5   | Units    |
|-----------------------|-------|------|-------|-------|------|----------|
| Frequency             | 50    | 150  | 220   | 450   | 900  | MHz      |
| Attenuation, Typ      | 5.1   | 8.9  | 10.9  | 15.8  | 22.8 | dB/100ft |
|                       | 16.73 | 29.2 | 35.76 | 51.84 | 74.8 | dB/100m  |
| Input Power (CW), Max | 180   | 100  | 83    | 57    | 39   | Watts    |

| Description           | F6    | F7     | F8     | F9     | F10   | Units    |
|-----------------------|-------|--------|--------|--------|-------|----------|
| Frequency             | 1.5   | 1.8    | 2      | 2.5    | 5.8   | GHz      |
| Attenuation, Typ      | 30.1  | 33.2   | 35.2   | 39.8   | 64.1  | dB/100ft |
|                       | 98.75 | 108.92 | 115.49 | 130.58 | 210.3 | dB/100m  |
| Input Power (CW), Max | 29    | 27     | 25     | 22     | 13    | Watts    |

#### Mechanical Specifications

|                                 |                          |
|---------------------------------|--------------------------|
| Diameter                        | 0.11 in [2.79 mm]        |
| Weight                          | 0.008 lbs/ft [0.01 kg/m] |
| Min. Bend Radius (Installation) | 0.25 in [6.35 mm]        |
| Min. Bend Radius (Repeated)     | 1 in [25.4 mm]           |
| Bending Moment                  | 0.1 lbs-ft [0.14 N-m]    |
| Tensile Strength                | 15 lbs [6.8 kg]          |
| Flat Plate Crush                | 10 lbs/in [0.18 kg/mm]   |

#### Construction Specifications

| Description     | Material and Plating | Diameter           |
|-----------------|----------------------|--------------------|
| Inner Conductor | Copper               | 0.018 in [0.46 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax LMR-100A-UF](#)



## LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax

**RF Cables**  
**Technical Data Sheet****LMR-100A-UF**

|                |               |                    |
|----------------|---------------|--------------------|
| Conductor Type | Stranded      |                    |
| Dielectric     | PE            | 0.06 in [1.52 mm]  |
| First Shield   | Aluminum Tape | 0.068 in [1.73 mm] |
| Second Shield  | Tinned Copper | 0.083 in [2.11 mm] |
| Jacket         | TPE, Black    | 0.11 in [2.79 mm]  |

**Environmental Specifications****Temperature**

Operating Range

-40 to +85 deg C

Installation Range

-40 to +85 deg C

Storage Range

-70 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)**Plotted and Other Data**

Notes:

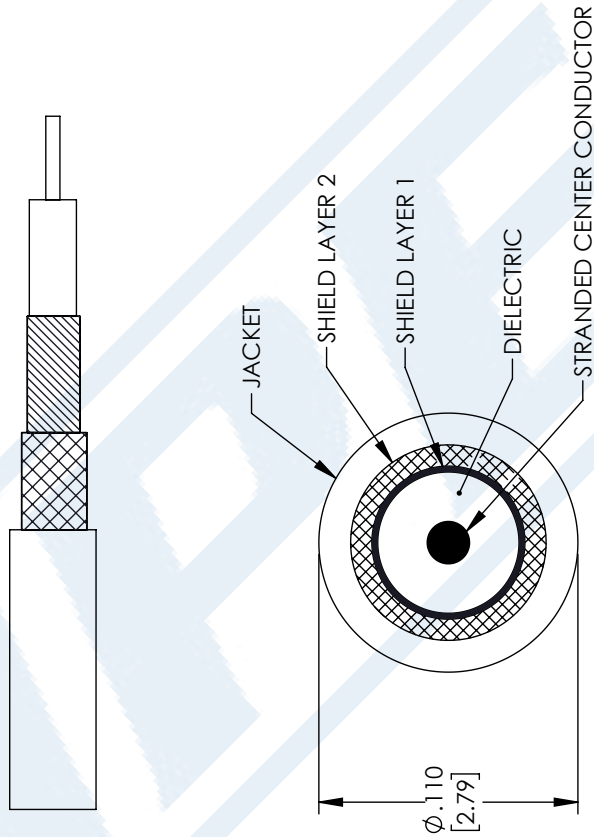
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URL: <https://www.pasternack.com/low-loss-flexible-lmr-100a-uf-tpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-100a-uf-p.aspx>

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| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 06-04-2021 | SELLIS   |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                  |                                                                                                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>PE PASTERNAK</b><br>an INFINITI® brand<br>Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623.<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>Website: www.pasternack.com<br>E-mail: sales@pasternack.com                                                                                                                                                                                                                            |                                                  | THIRD-ANGLE PROJECTION<br><br>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.<br>SHEET 1 OF 1<br>SCALE N/A |  |
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS<br>TOLERANCES:<br>.X = ±.2 [5.08]<br>.XX = ±.02 [.51]<br>.XXX = ±.005 [.13]<br>ANGLES ± 1°<br>CABLE LENGTH (L) TOLERANCES:<br>L ≤ 12 [305] = +1 [25] / -0<br>12 [305] < L ≤ 60 [1524] = +2 [51] / -0<br>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0<br>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0<br>300 [7620] < L = +5% / -0<br>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | SIZE A<br>CAGE CODE 53919<br>DRAWN BY MVEERAPPAN | ITEM NO. LMR-100A-UF<br>REV A                                                                                                                                        |  |

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