



N Female Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

PE4438

### Configuration

- N Female Connector
- 50 Ohms
- Straight Body Geometry
- RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch Interface Type
- Crimp/Solder Attachment

### Features

- Gold Plated Contact

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4438 type N female connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and 0.100 inch is part of our full line of RF components available for same-day shipping.

Our type N female connector PE4438 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.

### Mechanical Specifications

#### Size

|            |                     |
|------------|---------------------|
| Length     | 1.585 in [40.26 mm] |
| Width/Dia. | 0.625 in [15.88 mm] |
| Weight     | 0.066 lbs [29.94 g] |

#### Material Specifications

| Description | Material | Plating |
|-------------|----------|---------|
| Contact     |          | Gold    |
| Insulation  | PTFE     |         |
| Body        | Brass    | Nickel  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4438](#)



N Female Connector Crimp/Solder Attachment for RG174,  
RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

PE4438

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

### Plotted and Other Data

Notes:

N Female Connector Crimp/Solder 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% availability and are part of the broadest selection in the industry.

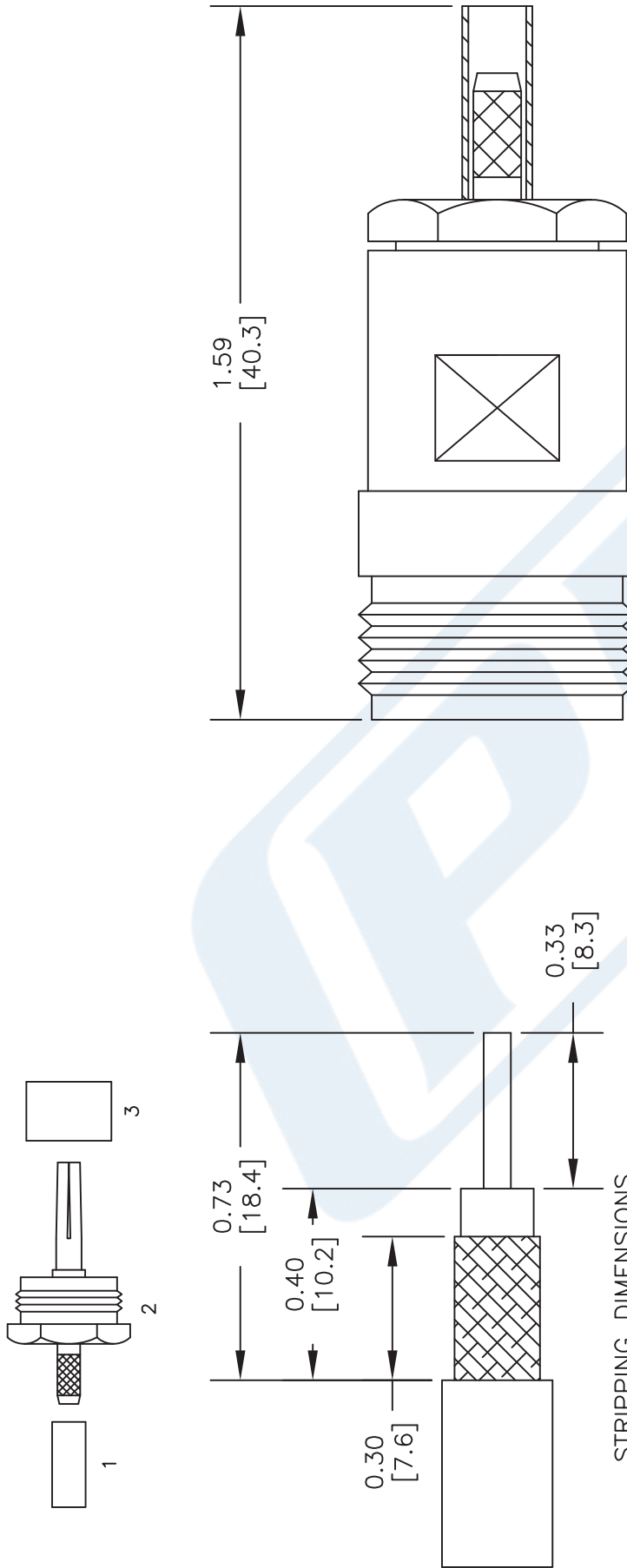
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4438](#)

URL: <https://www.pasternack.com/n-female-standard-rg174-rg316-rg188-connector-pe4438-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.

# PE4438 CAD Drawing

N Female Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE (1) ONTO CABLE. TIN CENTER CONDUCTOR.
2. ADD EXTENSION (2) BY SLIDING EXTENSION BETWEEN BRAID & DIELECTRIC. SLIDE FERRULE (1) OVER BRAID & CRIMP.
3. SOLDER CENTER CONDUCTOR THROUGH HOLE IN CONTACT. SLIDE PTFE (3) OVER CONTACT. SLIDE ASSEMBLY INTO BODY & TIGHTEN.

## CRIMP SIZE REQUIRED

CONTACT: SOLDER  
FERRULE: .128" HEX CRIMP TOOL



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P.O. Box 16759 | Irvine | CA | 92623  
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DWG TITLE

**PE4438**

- 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.

REV. -

FSCM NO. 53919

CAD FILE 052202

SCALE N/A

SIZE A

2233



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

## RF Connectors Technical Data Sheet

**PE4003**

### 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 12.4 GHz
- Excellent VSWR of 1.21:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4003 , 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 12.4 GHz and offers excellent VSWR of 1.21:1.

Our SMA male connector PE4003 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      |         | 12.4    | GHz   |
| VSWR                   |         |         | 1.21:1  |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |
| Impedance              |         | 50      |         | Ohms  |

### Mechanical Specifications

#### Size

|               |                                 |
|---------------|---------------------------------|
| Length        | 0.87 in [22.10 mm]              |
| Width         | 0.32 in [8.00 mm]               |
| Height        | 4.20 in [106.68 mm]             |
| Weight        | 0.01 lbs [5.44 g]               |
| Mating Torque | 3 to 5 in-lbs [0.34 to 0.57 Nm] |

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 Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch PE4003](#)



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

## RF Connectors Technical Data Sheet

**PE4003**

### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>30 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>100 µin minimum |
| Crimp Sleeve | Brass    | Nickel                    |

### 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 Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .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.

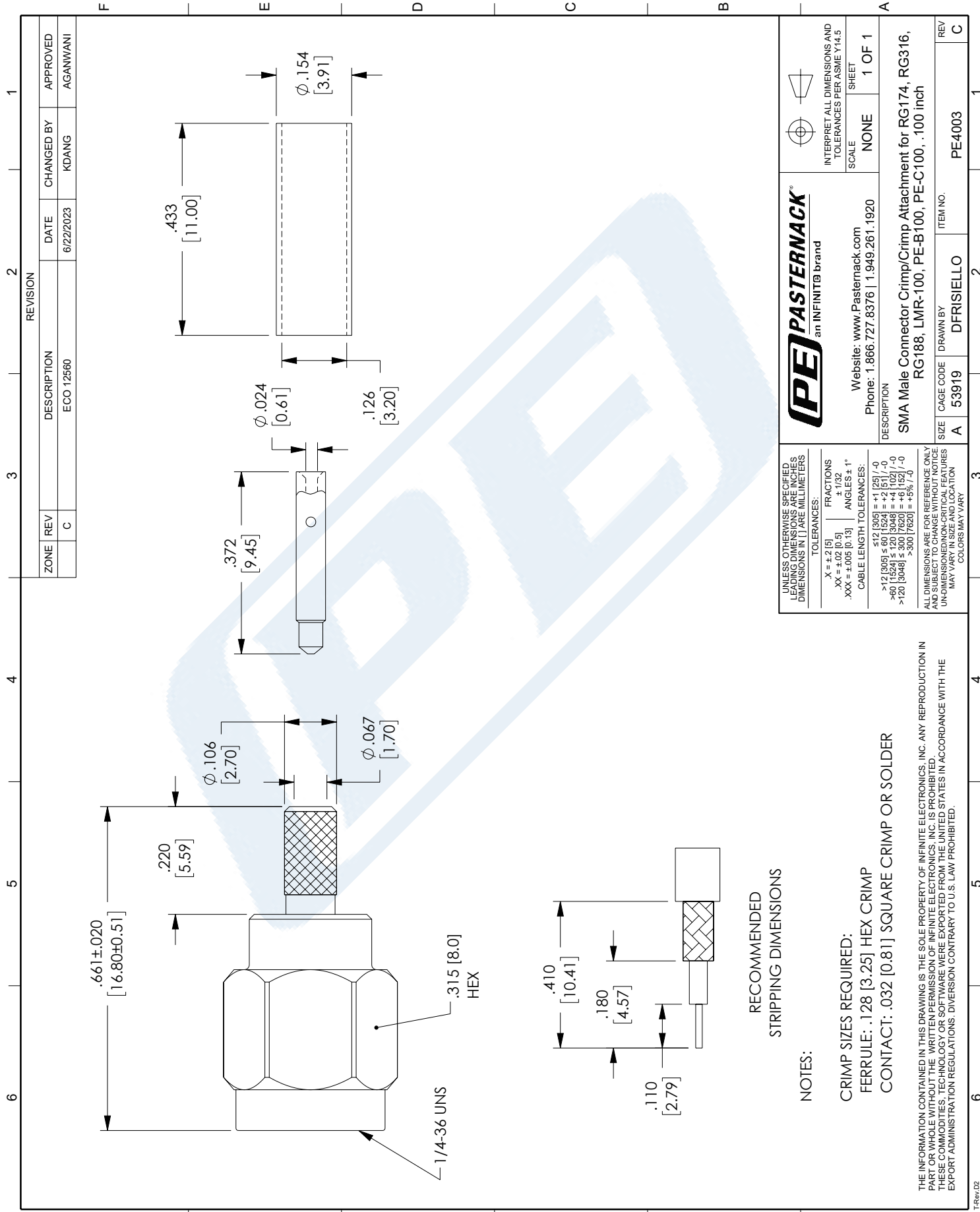
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch PE4003](#)

URL: <https://www.pasternack.com/sma-male-rg174-rg316-lmr-100-pe-b100-pe-c100-connector-pe4003-p.aspx>

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# PE4003 CAD Drawing

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



RECOMMENDED STRIPPING DIMENSIONS

NOTES:

CRIMP SIZES REQUIRED:  
 FERRULE: .128 [3.25] HEX CRIMP  
 CONTACT: .032 [0.81] SQUARE CRIMP OR SOLDER

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|      |  |     |             |           |            |          |
|------|--|-----|-------------|-----------|------------|----------|
| ZONE |  | REV | DESCRIPTION | DATE      | CHANGED BY | APPROVED |
|      |  | C   | ECO 12560   | 6/22/2023 | KDANG      | AGANWANI |

|   |            |   |
|---|------------|---|
| <b>PASTERNAK</b><br>an INFINIT® brand   |            | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5<br>SCALE: NONE<br>SHEET: 1 OF 1                  |
| Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a><br>Phone: 1.866.727.8376   1.949.261.1920 |            | SMA Male Connector Crimp/Crimp Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch |
| DESCRIPTION   | CAGE CODE  | ITEM NO.  |
| A 53919   | DFRISIELLO | PE4003  |
| DRAWN BY  | REV        |   |
| DFRISIELLO  | C          |   |

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

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

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] = +8% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS INDICATED OTHERWISE. UN-DIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.



## Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated

### RF Cables Technical Data Sheet



LMR-100A-FR

### Times Microwave Systems Coax Cable Specification

#### Configuration

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

#### Features

- CMR Riser Rated Coax
- Non-Halogen, Low Smoke FRPE Jacket
- Max Operating Frequency of 5.8 GHz
- Phase Velocity 66% VoP
- Max Operating Temperature +85°C
- Min Install Bend Radius of 0.25 inches

#### Applications

- In-Building Riser Runs
- Short Antenna Installs
- RF Test Systems
- General Purpose RF Interconnect
- Laboratory Applications

#### Description

LMR-100-FR Fire Rated 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-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-100-FR is constructed with a 0.110 inch diameter and Black FRPE jacket.

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

LMR-100-FR cable is part of more than one million RF, microwave parts in stock at Pasternack. This Times Microwave low loss flexible LMR-100-FR 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: [Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated LMR-100A-FR](#)



## Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated

### RF Cables Technical Data Sheet



LMR-100A-FR

|                               |               |              |
|-------------------------------|---------------|--------------|
| 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                          | 0.0092 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, 1 Strand     | 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: [Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated LMR-100A-FR](#)



## Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated

### RF Cables Technical Data Sheet



LMR-100A-FR

|                |               |                   |
|----------------|---------------|-------------------|
| Conductor Type | Solid         |                   |
| Dielectric     | PE            | 0.06 in [1.52 mm] |
| First Shield   | Aluminum Tape | [ ]               |
| Second Shield  | Tinned Copper | [ ]               |
| Jacket         | FRPE, 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:

Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable Double Shielded with Black FRPE Jacket Fire Rated 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/low-loss-flexible-lmr100fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-100a-fr-p.aspx>

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**TIMES** MICROWAVE SYSTEMS **LMR-100A-FR CAD Drawing**  
 Low Loss Flexible LMR-100-FR Outdoor Rated Coax Cable  
 Double Shielded with Black FRPE Jacket Fire Rated

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



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

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 .XX = ±.02 [ .51]    ANGLES ± 1°  
 .XXX = ±.005 [ .13]

**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% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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 E-mail: sales@pasternack.com

ITEM NO. LMR-100A-FR

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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