

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



## 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  $\mu$ m 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 [22.1 mm]
Width	0.315 in [8.00 mm]
Height	4.2 in [106.68 mm]
Weight	0.012 lbs [5.44 g]
Mating Cycles	500 Cycles
Mating Torque	3 to 5 in-lbs [[0.34 to 0.57 Nm]]

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



## PE4003

### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 30 $\mu$ in minimum
Insulation	PTFE	
Body	Brass	Nickel 100 $\mu$ in minimum
Coupling Nut	Brass	Nickel 100 $\mu$ in 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.

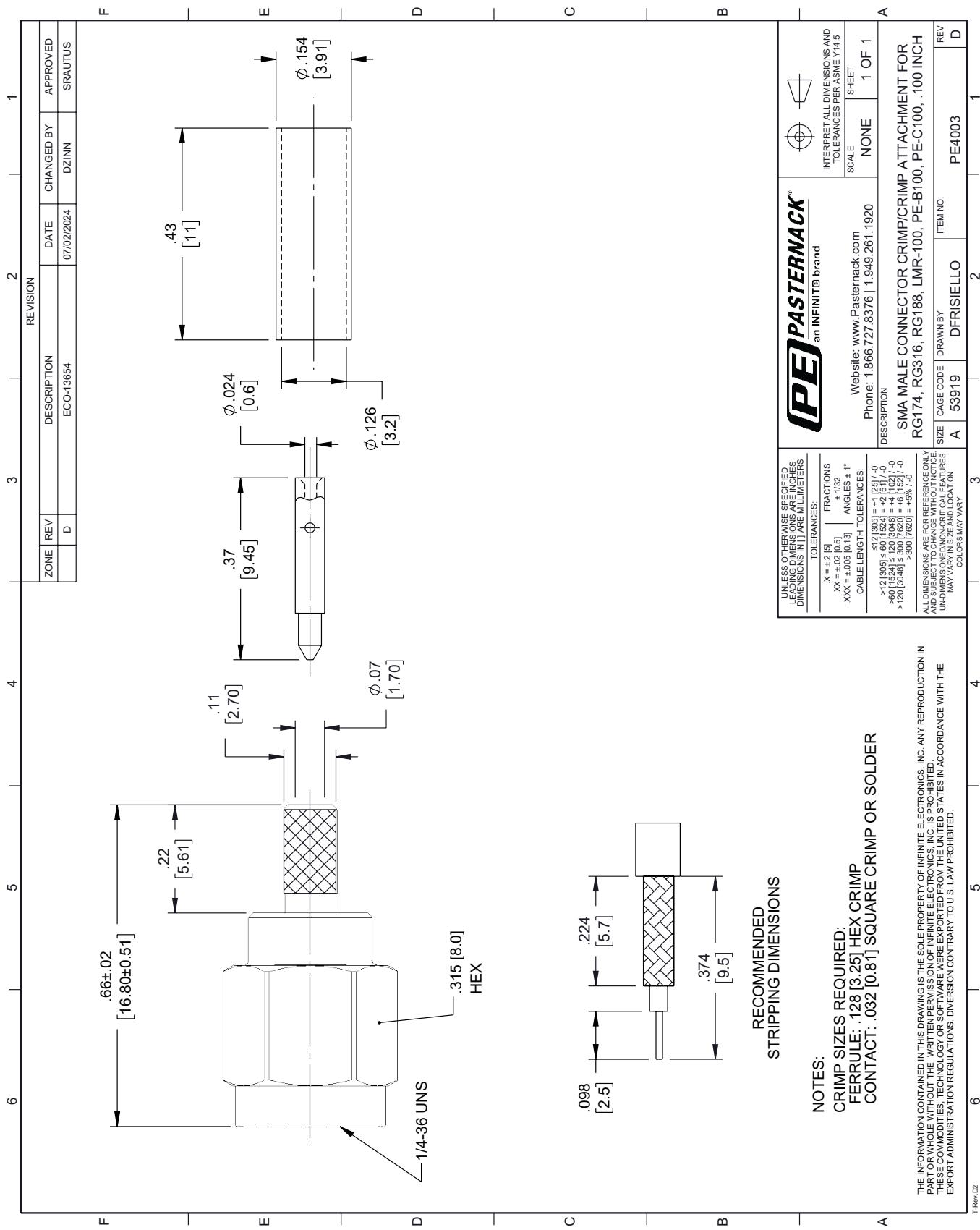
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch PE4003](https://www.pasternack.com/sma-male-rg174-rg316-lmr-100-pe-b100-pe-c100-connector-pe4003-p.aspx)

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

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE4003 CAD Drawing

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



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



## RF Connectors Technical Data Sheet

PE45045

### Configuration

- BNC Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry

- .100 inch, RG316, RG174, RG188, LMR-100, LMR-100, LMR-100-FR, PE-C100, PE-B100 Interface Type
- Crimp/Crimp Attachment

### Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.25:1

- Gold Plated Brass Contact
- 50 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE45045 BNC male connector with crimp/crimp attachment for .100 inch, RG316, RG174, RG188, LMR-100, LMR-100, LMR-100-FR, PE-C100 and PE-B100 is part of our full line of RF components available for same-day shipping. Our BNC male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.25:1.

Our BNC male connector PE45045 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			1.25:1	
Operating Voltage (AC)			335	Vrms

### Mechanical Specifications

Size	
Length	0.99 in [25.15 mm]
Width/Dia.	0.57 in [14.48 mm]
Weight	0.027 lbs [12.25 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male Connector Crimp/Crimp Attachment for .100 inch, RG316, RG174, RG188, LMR-100, LMR-100, LMR-100-FR, PE-C100, PE-B100 PE45045](#)

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



## RF Connectors Technical Data Sheet

PE45045

### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 $\mu$ in minimum
Insulation	PTFE	
Body	Brass	Nickel 100 $\mu$ in minimum
Coupling Nut	Brass	Nickel 100 $\mu$ in minimum
Gasket	Silicone Rubber	

### Environmental Specifications

#### Temperature

Operating Range

-65 to +165 deg C

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

### Plotted and Other Data

Notes:

### Assembly Instruction

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

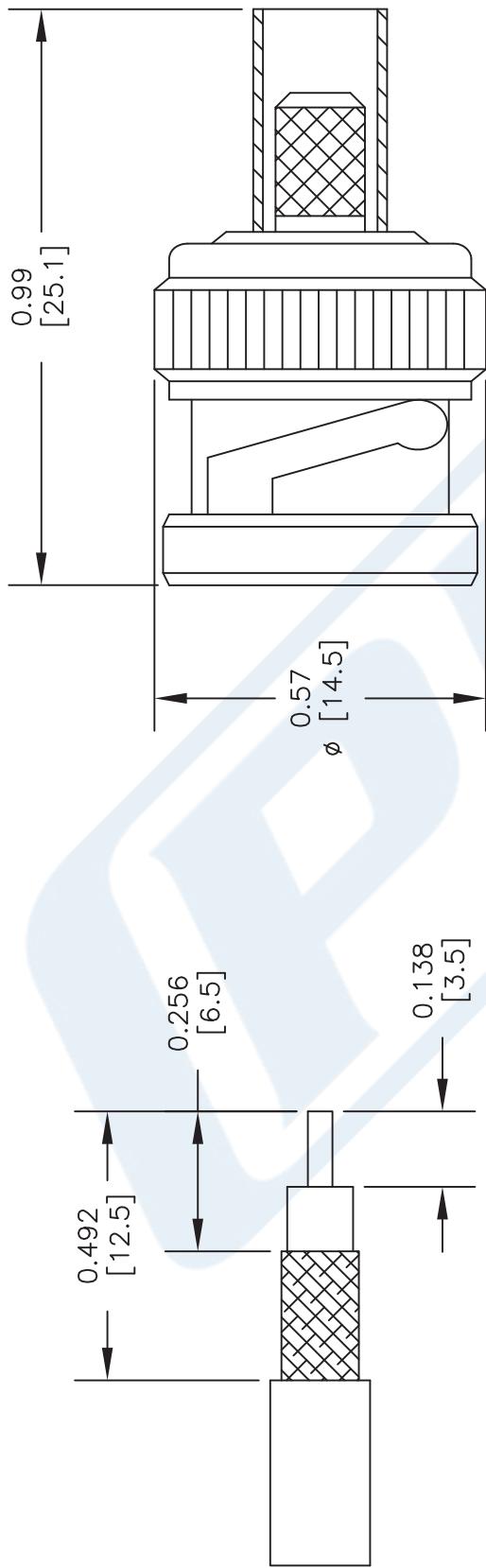
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male Connector Crimp/Crimp Attachment for .100 inch, RG316, RG174, RG188, LMR-100, LMR-100, LMR-100-FR, PE-C100, PE-B100 PE45045](#)

URL: <https://www.pasternack.com/bnc-male-.100-rg316-rg188-lmr-100-lmr-100-connector-pe45045-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.

# PE45045 CAD Drawing

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



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.

DWG TITLE	PE45045	CAGE CODE	53919	CAD FILE	021617	SCALE	N/A	SIZE	A	2233
-----------	---------	-----------	-------	----------	--------	-------	-----	------	---	------

**PASTERNACK®**  
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

Website: [www.pasternack.com](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

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



### LMR-100A-FR



### Times Microwave Systems Connector 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 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 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		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
Jacket Spark			2,000	Vrms
Inner Conductor DC Resistance		81		Ohms/1000ft
Outer Conductor DC Resistance			9.5	Ohms/1000ft

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



### LMR-100A-FR

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
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	0.009 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]
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]

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



### LMR-100A-FR

#### Environmental Specifications

##### Temperature

Operating Range  
Installation Range  
Storage Range

-40 to 85 deg C  
-40 to 85 deg C  
-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.

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](#)

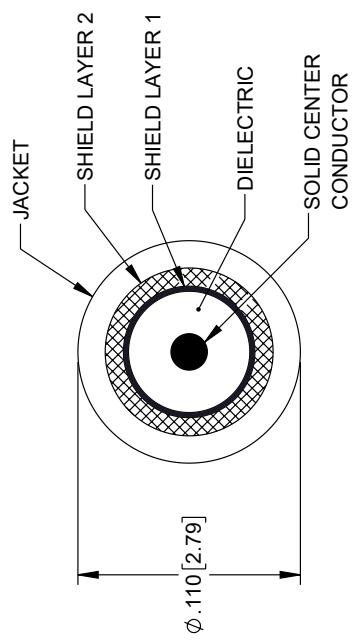
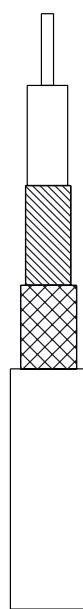
URL: <https://www.pasternack.com/low-loss-flexible-lmr100fr-frpe-jacket-aluminum-tape-over-tinned-copper-outer-conductor-double-shielded-lmr-100a-fr-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

LMR-100A-FR CAD Drawing

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

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	B	UPDATED PER ECO-13410	05/08/2024	HBAKKE	SRAUTUS



1

2

3

4

5

6

F E D C B

ZONE REV DESCRIPTION DATE CHANGED BY APPROVED

B UPDATED PER ECO-13410 05/08/2024 HBAKKE SRAUTUS

REVISION

1

2

3

4

5

6

F E D C B

Φ.110 [2.79]

JACKET

SHIELD LAYER 2

SHIELD LAYER 1

DIELECTRIC

SOLID CENTER CONDUCTOR

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. FOLLOWING DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES:  
 $X = \pm 0.2 [5]$  FRACTIONS  
 $XX = \pm 0.02 [0.5]$  ANGLES  
 $XXX = \pm 0.005 [0.3]$  ANGLES  $\pm 1^\circ$

CABLE LENGTH TOLERANCES:  
 $\geq 12 [305] \leq 80 [203] = +1 [25] / -0$   
 $\geq 12 [305] \leq 60 [152] = +2 [51] / -0$   
 $\geq 60 [152] \leq 120 [305] = +4 [102] / -0$   
 $\geq 120 [305] \leq 300 [762] = +6 [152] / -0$   
 $\geq 300 [762] \leq 600 [1524] = +9% [-4%]$

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNDIMENTIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLOURS MAY VARY.

**PASTERNACK®**  
an INFINITE® brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE SHEET

1 OF 1

DESCRIPTION: LOW LOSS FLEXIBLE LMR-100-FR OUTDOOR RATED COAX CABLE DOUBLE SHIELDED WITH BLACK FRPE JACKET FIRE RATED

ITEM NO. LMR-100A-FR

REV B

PE Rev-D4 As/2e

The information contained in this drawing is the sole property of INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. 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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. 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.