

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A



RF Connectors Technical Data Sheet

PE45497

Configuration

- SSMC Plug Connector
- 50 Ohms
- Right Angle Body Geometry

- Connector Interface Types: RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.62:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling

- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

Applications

| | | |
|---------------------------|--------------------------------|------------------------------------|
| • General Purpose Test | • A/D Modules | • RADAR/SONAR |
| • Custom Cable Assemblies | • Data Acquisition | • Ultra Wideband Digital Receivers |
| • Avionics | • Software defined radio (SDR) | • Medical equipment |

Description

Pasternack's PE45497 SSMC plug right angle connector with crimp/solder attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR and LMR-100A is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.62:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45497 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 | | | 1.62:1 | |
| Insertion Loss | | 0.3 | | dB |
| Operating Voltage (AC) | | | 250 | Vrms |
| High Potential Voltage 5 MHz | | | 400 | Vrms |
| Inner Conductor DC Resistance | | 4 | | mOhms |
| Outer Conductor DC Resistance | | 1 | | mOhms |
| Insulation Resistance | 1,000 | | | MOhms |
| RF Leakage | -50 | | | dB |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497](#)

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A



RF Connectors Technical Data Sheet

PE45497

Mechanical Specifications

Size

Length

0.421 in [10.69 mm]

Width/Dia.

0.156 in [3.96 mm]

Height

0.33 in [8.38 mm]

Weight

0.007 lbs [3.18 g]

Mating Cycles

500 Cycles

Mating Torque

1.75 to 2 in-lbs [0.20 to 0.23 Nm]

Material Specifications

| Description | Material | Plating |
|--------------|------------------|---------------------|
| Contact | Beryllium Copper | Gold MIL-G-45204 |
| Insulation | Teflon | |
| Body | Brass | Gold MIL-G-45204 |
| Coupling Nut | Beryllium Copper | Gold MIL-G-45204 |
| Crimp Sleeve | Brass | Gold MIL-G-45204 |

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

Shock

Method 213, Condition B, 75G @6ms @ 1/2 sine

Vibration

Method 204, Condition D (20G)

Salt Spray

Method 101, Condition B, 5% salt solution

Compliance Certifications

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

Plotted and Other Data

Notes:

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SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A

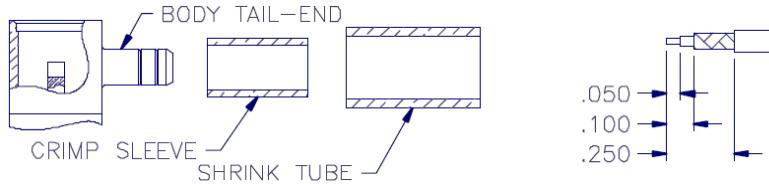


RF Connectors
Technical Data Sheet

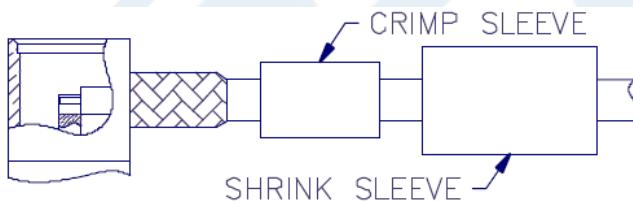
PE45497

Assembly Instruction

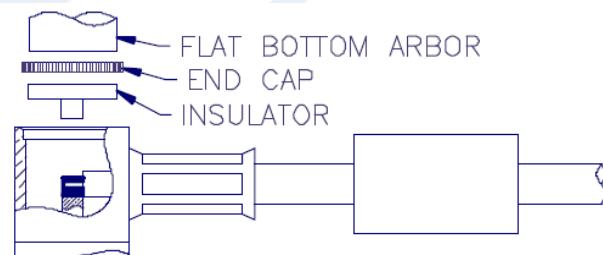
Assembly Instructions



1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .128 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185" DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE. CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

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SSMC Plug Right Angle Connector Crimp/Solder
Attachment for RG316, RG188, RG174, PE-C100-
LSZH, PE-B100, LMR-100A-FR, LMR-100A



RF Connectors
Technical Data Sheet

PE45497

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A 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.

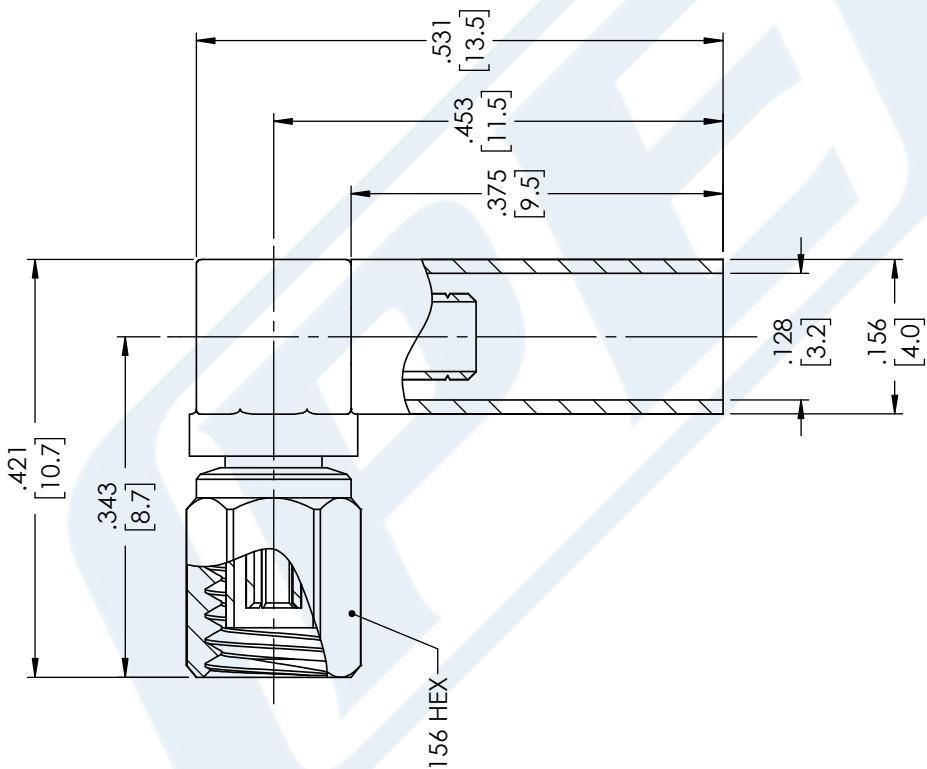
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE45497 CAD Drawing

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316,
RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A



| STANDARD TOLERANCES | |
|---------------------|-------------|
| X | ± 0.2 |
| .XX | ± 0.01 |
| .XXX | ± 0.005 |

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

PASTERACK
THE ENGINEER'S RF SOURCE

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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].

CN2245

08/13/18

CAD FILE

PE45497

SIZE A

53919

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 μ 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 |
| Width |
| Height |
| Weight |
| Mating Cycles |
| Mating Torque |

| |
|-----------------------------------|
| 0.87 in [22.1 mm] |
| 0.315 in [8.00 mm] |
| 4.2 in [106.68 mm] |
| 0.012 lbs [5.44 g] |
| 500 Cycles |
| 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 μ in minimum |
| Insulation | PTFE | |
| Body | Brass | Nickel 100 μ in minimum |
| Coupling Nut | Brass | Nickel 100 μ 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.

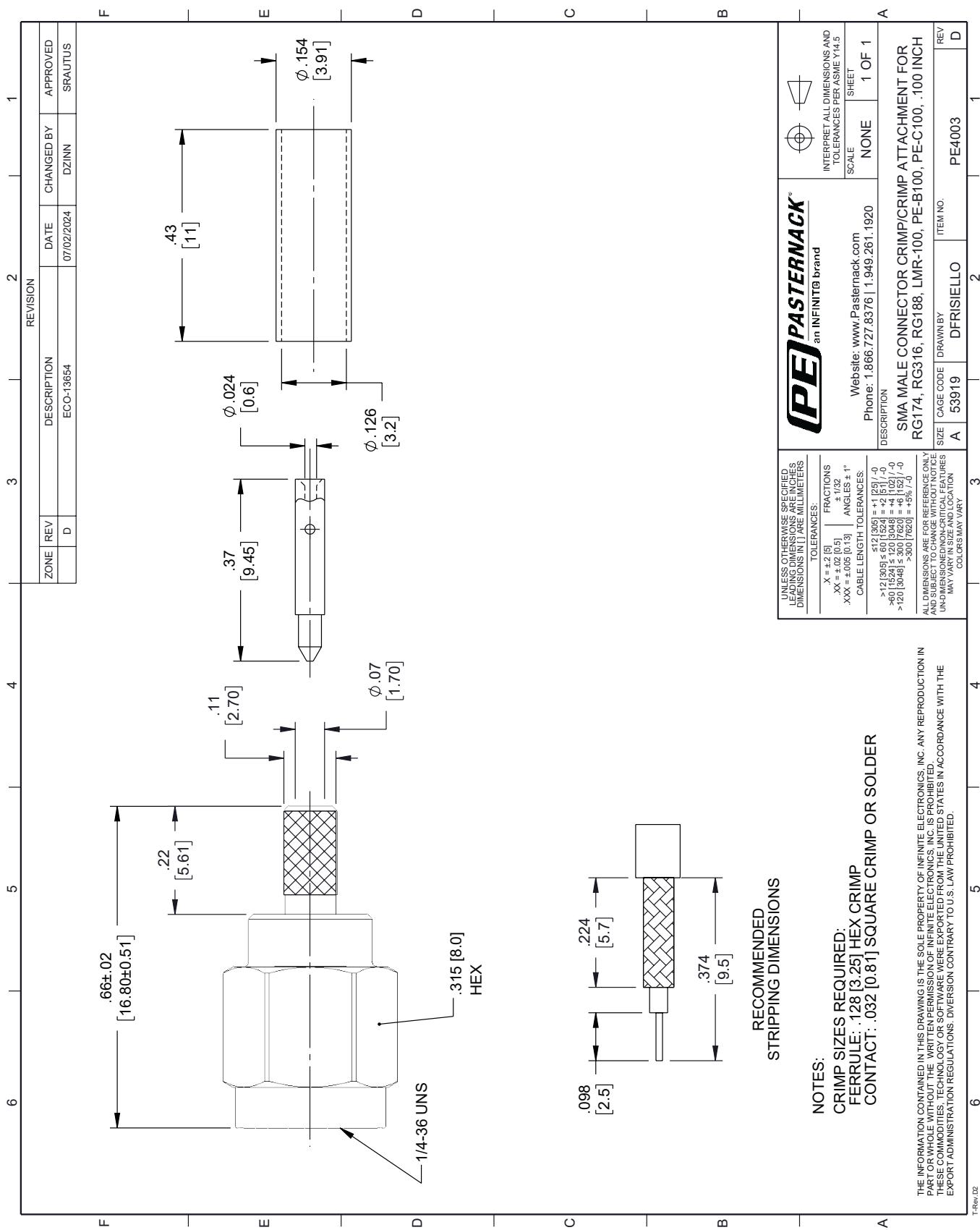
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch PE4003](https://www.pasternack.com/sma-male-rg174-rg316-lmr-100-pe-b100-pe-c100-connector-pe4003-p.asp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

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

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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



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



LMR-100A-UF



Times Microwave Systems Connector Specification

Configuration

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

Features

- Ultra Flexible Coax with Stranded Center Conductor
- Max Operating Frequency of 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
- Antenna Installs
- Laboratory Applications
- General Purpose RF Interconnect
- Jumper Assemblies

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 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 | | 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 |

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



LMR-100A-UF

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 | 0.008 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, 1 Strand | 0.018 in [0.46 mm] |
| 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] |

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



LMR-100A-UF

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:

LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax 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: [LMR-100-UF Ultra Flex version of the 100 series Low Loss Coax LMR-100A-UF](#)

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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LMR-100A-UF CAD Drawing

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

