

# 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
- Custom Cable Assemblies
- Avionics

- A/D Modules
- Data Acquisition
- Software defined radio (SDR)

- RADAR/SONAR
- Ultra Wideband Digital Receivers
- 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<br>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<br>MIL-G-45204 |
| Insulation   | Teflon           |                     |
| Body         | Brass            | Gold<br>MIL-G-45204 |
| Coupling Nut | Beryllium Copper | Gold<br>MIL-G-45204 |
| Crimp Sleeve | Brass            | Gold<br>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:

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

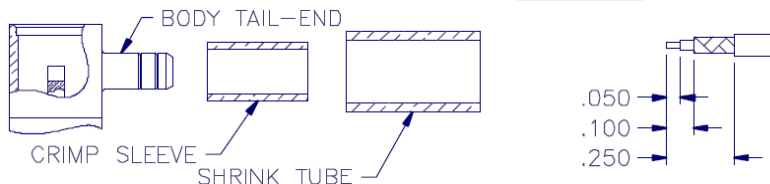


**RF Connectors**  
**Technical Data Sheet**

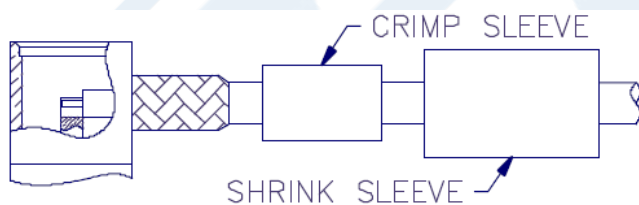
**PE45497**

**Assembly Instruction**

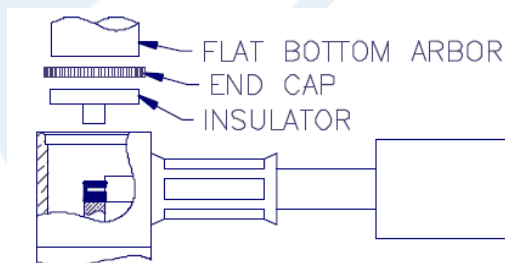
**Assembly Instructions**



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.

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**

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.

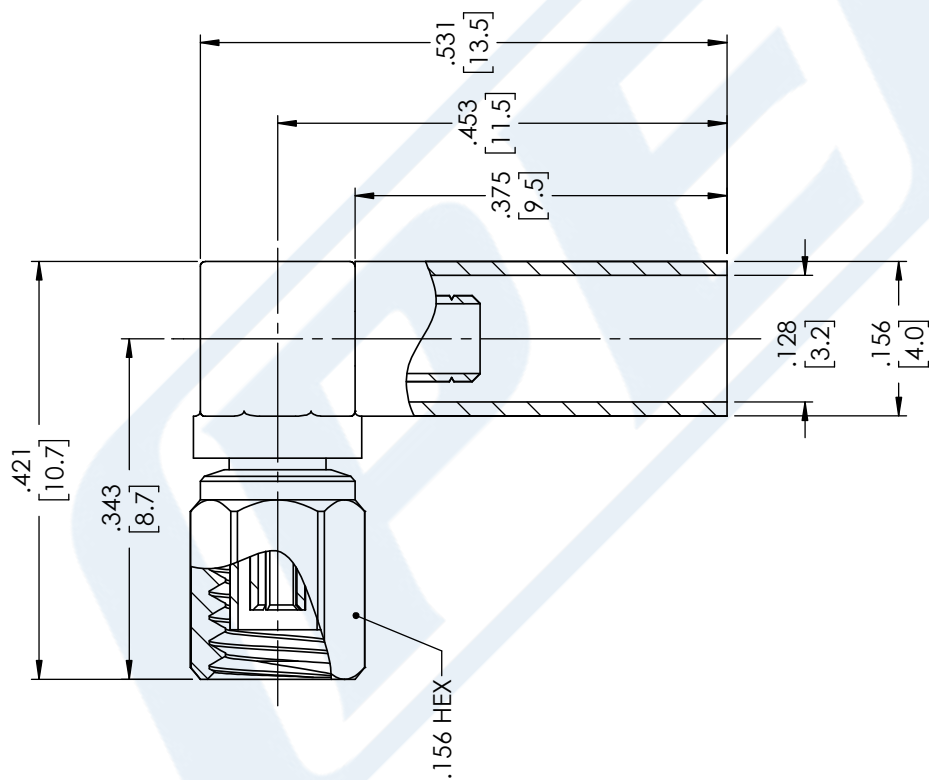
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG316, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, LMR-100A PE45497](https://www.pasternack.com/ssmc-plug-right-angle-connector-crimp-solder-attachment-for-rg316-rg188-rg174-pe-c100-lszh-pe-b100-lmr-100a-fr-lmr-100a-pe45497)

URL: <https://www.pasternack.com/ssmc-plug-rg316-rg188-pe-c100-lszh-pe-b100-fr-connector-pe45497-p.aspx>

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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



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DWG TITLE

PE45497

CAGE CODE 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].

CAD FILE 08/13/18

SCALE N/A

SIZE A

CN2245



SMB Jack Bulkhead Mount Connector Crimp/  
Solder Attachment for RG174, RG316, RG188,  
LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

**PE4097**

### Configuration

- SMB Jack Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch
- Bulkhead

### Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

### Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

### Description

Pasternack's PE4097 SMB jack bulkhead connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and .100 inch is part of our full line of RF components available for same-day shipping. Our SMB jack connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1. This SMB bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our SMB jack bulkhead connector PE4097 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      |         | 4       | GHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |

### Mechanical Specifications

#### Size

|            |                     |
|------------|---------------------|
| Length     | 0.867 in [22.02 mm] |
| Width/Dia. | 0.25 in [6.35 mm]   |
| Height     | 0 in [0 mm]         |
| Weight     | 0.005 lbs [2.27 g]  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4097](#)



SMB Jack Bulkhead Mount Connector Crimp/  
Solder Attachment for RG174, RG316, RG188,  
LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

**PE4097**

### Material Specifications

| Description | Material | Plating                   |
|-------------|----------|---------------------------|
| Contact     | Brass    | Gold<br>30 µin minimum    |
| Insulation  | PTFE     |                           |
| Body        | 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:

SMB Jack Bulkhead Mount 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 99.4% 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: [SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4097](#)

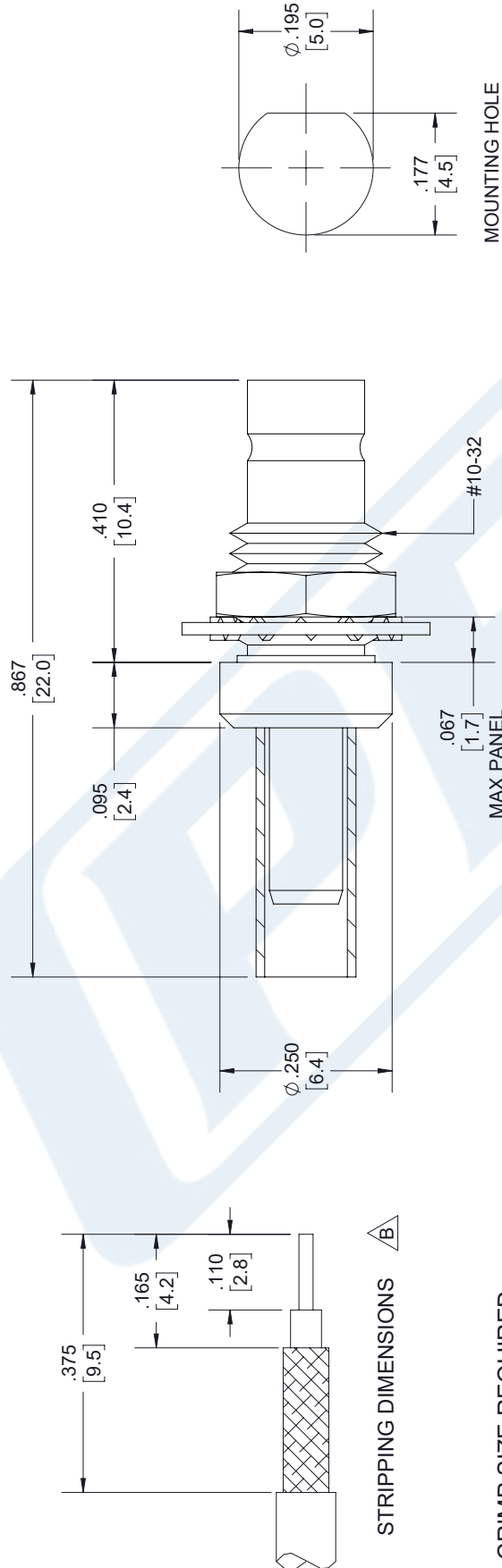
URL: <https://www.pasternack.com/smb-jack-standard-rg174-rg316-rg188-connector-pe4097-p.aspx>

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# PE4097 CAD Drawing

SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for  
RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

| REVISIONS |                            |         |          |
|-----------|----------------------------|---------|----------|
| REV.      | DESCRIPTION                | DATE    | APPROVED |
| B         | UPDATE WIRE STRIPPING DIMS | 5/19/22 | SRAUTUS  |



**CRIMP SIZE REQUIRED**  
CONTACT: SOLDER  
FERRULE: .128" HEX CRIMP TOOL

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]                | ± .125 / -0       |
| 12 [305] < L ≤ 60 [1524]    | ± .25 [6.35] / -0 |
| 60 [1524] < L ≤ 120 [3048]  | ± .50 [12.7] / -0 |
| 120 [3048] < L ≤ 300 [7620] | ± 1.0 [25.4] / -0 |
| 300 [7620] < L              | ± 5% L / -0       |

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITI brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

|      |           |          |          |     |
|------|-----------|----------|----------|-----|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
| A    | 53919     | HBAKKE   | PE4097   | B   |

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## Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



### LMR-100A-PVC

#### Times Microwave Systems Coax Cable Specification

##### Configuration

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

##### Features

- Max Operating Frequency of 8 GHz
- Low Loss Cable
- Phase Velocity 66% VoP

##### Applications

- Laboratory Applications
- General Purpose RF Interconnect

##### Description

LMR-100A-PVC part number from Pasternack is a LMR-100A-PVC coax cable that is flexible. Pasternack LMR-100A flexible coax cable is 50 Ohm and has a PE dielectric. Our LMR-100A coax is constructed with a 0.11 jacket made of PVC. LMR-100A coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-100A coax cable has an attenuation at 1 GHz of 24 dB.

Pasternack LMR-100A-PVC coax cables are part of over 40,000 RF, microwave and millimeter wave components. LMR-100A cables and our other RF parts are available for same day shipping worldwide. Custom RF cable assemblies using LMR-100A or other coax can be built and shipped same day as well.

#### Electrical Specifications

| Description                          | Minimum | Typical       | Maximum | Units        |
|--------------------------------------|---------|---------------|---------|--------------|
| Frequency Range                      | DC      |               | 8       | GHz          |
| Cutoff Frequency                     |         | 90            |         | 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  |
| 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        |

## Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



### LMR-100A-PVC

#### Performance by Frequency Band

| Description           | F1   | F2   | F3    | F4    | F5   | Units    |
|-----------------------|------|------|-------|-------|------|----------|
| Frequency             | 50   | 150  | 220   | 450   | 900  | MHz      |
| Attenuation, Typ      | 3.9  | 8.9  | 10.9  | 15.8  | 22.8 | dB/100ft |
|                       | 12.8 | 29.2 | 35.76 | 51.84 | 74.8 | dB/100m  |
| Input Power (CW), Max | 230  | 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 Clad Steel, 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 Braid         |                    |
| Jacket          | PVC, Black                  | 0.11 in [2.79 mm]  |

#### Environmental Specifications

|                    |                  |
|--------------------|------------------|
| <b>Temperature</b> |                  |
| Operating 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-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



### LMR-100A-PVC

Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket 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-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket LMR-100A-PVC](#)

URL: <https://www.pasternack.com/50-ohm-low-loss-flexible-lmr-100apvc-jacket-double-shielded-lmr-100a-pvc-p.aspx>

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