



BMA Jack Slide-On Connector Crimp/Solder Attachment 2 Hole Flange Mount for RG316, RG188, RG174, LMR-100A, PE-C100-LSZH

RF Connectors Technical Data Sheet

PE45321

Configuration

- Slide-On BMA Jack Connector
- 50 Ohms
- Straight Body Geometry
- RG316, RG188, RG174, LMR-100A, PE-C100-LSZH

- Interface Type
- Crimp/Solder Attachment
 - 2 Hole Flange

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.34:1
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector
- Low-Engagement Force
- Radial and Axial Float Versions

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies
- Blind Mating
- Rack and Panel
- Phased Array Systems
- Base Stations
- RF Backplanes
- Test I/O

Description

Pasternack's PE45321 BMA jack slide-on 2 hole flange mount connector with crimp/solder attachment for RG316, RG188, RG174, LMR-100A and PE-C100-LSZH is part of our full line of RF components available for same-day shipping. Our BMA jack connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.34:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated. This BMA 2 hole flange 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 BMA jack 2 hole flange connector PE45321 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 | | | 1.34:1 | |
| Insertion Loss | | | 0.1 | dB |
| Operating Voltage (AC) | | | 335 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 1,000 | Vrms |
| Insulation Resistance | 5,000 | | | MOhms |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Jack Slide-On Connector Crimp/Solder Attachment 2 Hole Flange Mount for RG316, RG188, RG174, LMR-100A, PE-C100-LSZH PE45321](#)



BMA Jack Slide-On Connector Crimp/Solder
Attachment 2 Hole Flange Mount for RG316,
RG188, RG174, LMR-100A, PE-C100-LSZH

RF Connectors Technical Data Sheet

PE45321

Mechanical Specifications

Size

| | |
|---------------|--------------------|
| Length | 0.97 in [24.64 mm] |
| Width/Dia. | 0.75 in [19.05 mm] |
| Weight | 0.011 lbs [4.99 g] |
| Mating Cycles | 1,000 Cycles |

Material Specifications

| Description | Material | Plating |
|-----------------|------------------|-----------|
| Contact | Beryllium Copper | Gold |
| Insulation | PTFE | |
| Outer Conductor | Beryllium Copper | Gold |
| Body | Brass | Tri-Metal |

Mechanical Specification Notes:

Recommended axial float mount for best electrical performance: 0.51 +/- 0.25 mm (.020" +/- .010)

Environmental Specifications

Temperature

| | |
|-----------------|-------------------|
| Operating Range | -55 to +125 deg C |
|-----------------|-------------------|

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BMA Jack Slide-On Connector Crimp/Solder
Attachment 2 Hole Flange Mount for RG316,
RG188, RG174, LMR-100A, PE-C100-LSZH

RF Connectors Technical Data Sheet

PE45321

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

Plotted and Other Data

Notes:

BMA Jack Slide-On Connector Crimp/Solder Attachment 2 Hole Flange Mount for RG316, RG188, RG174, LMR-100A, PE-C100-LSZH 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.

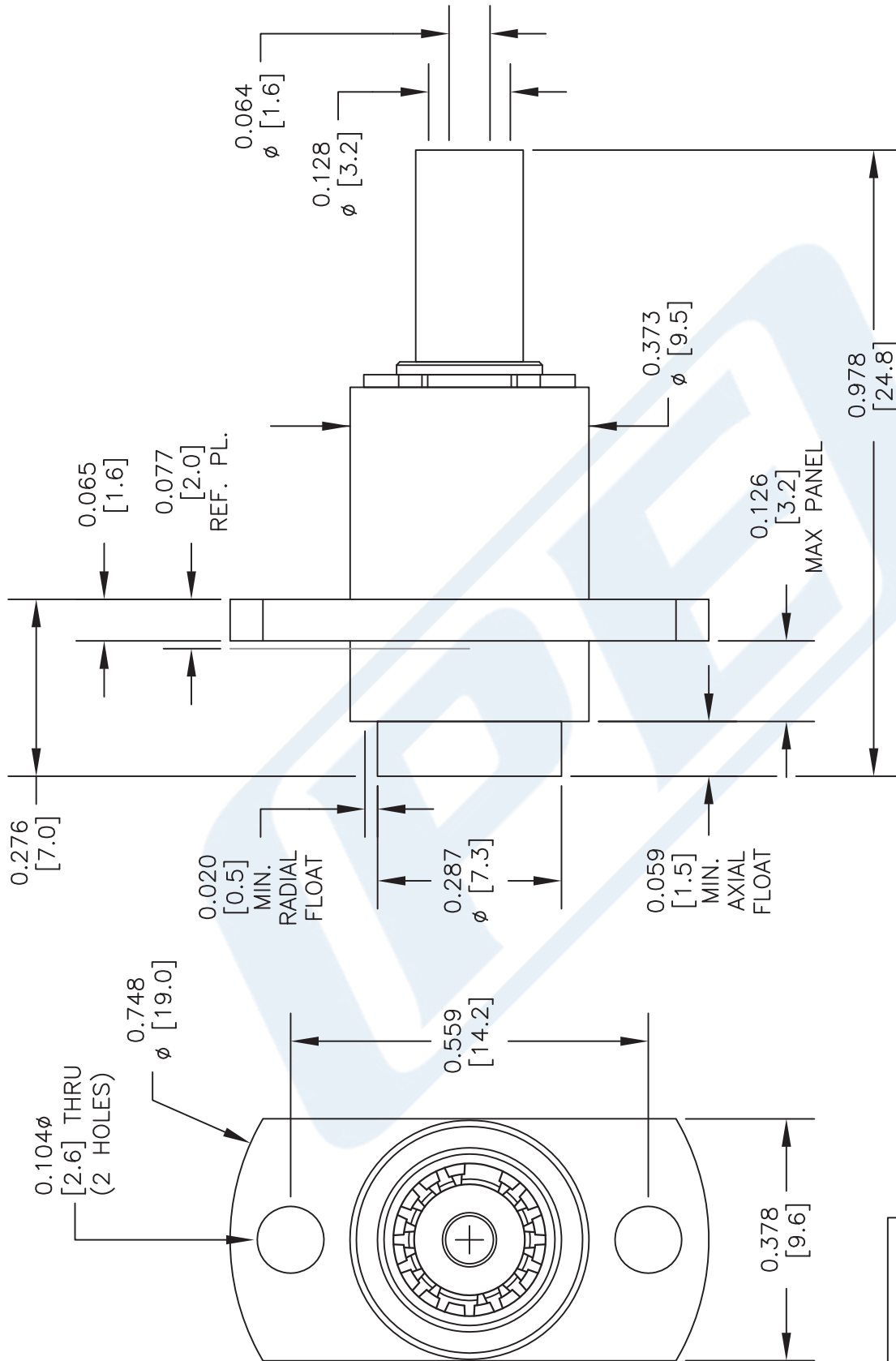
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URL: <https://www.pasternack.com/bma-jack-slide-on-rg316-rg188-rg174-lmr-100a-connector-pe45321-p.aspx>

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.

PE45321 CAD Drawing

BMA Jack Slide-On Connector Crimp/Solder Attachment 2 Hole Flange
Mount for RG316, RG188, RG174, LMR-100A, PE-C100-LSZH



STANDARD TOLERANCES

.X ±0.2
.XX ±0.1
.XXX ±0.05

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

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Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE45321

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].

CAGE CODE 53919

CAD FILE 022717

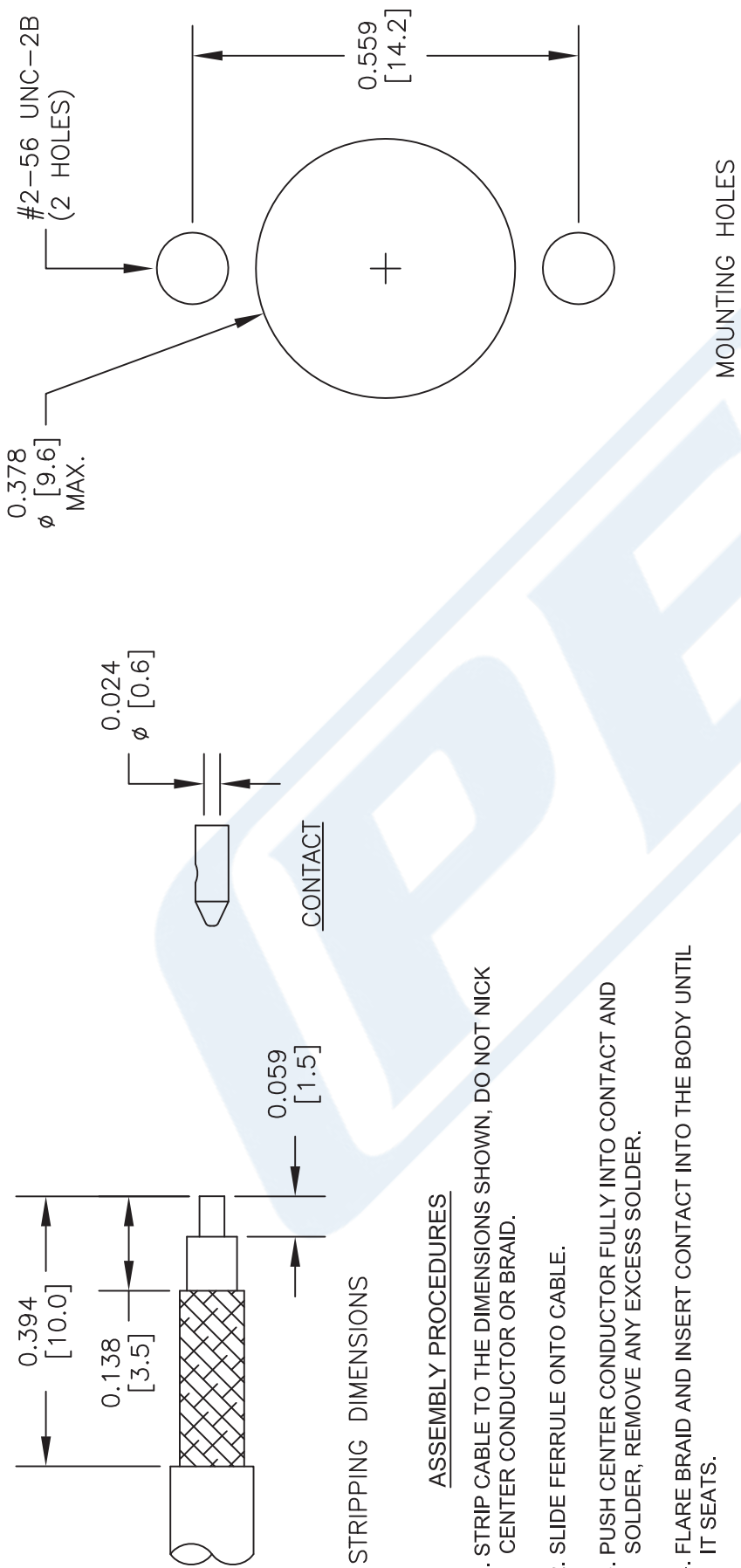
SCALE N/A

SIZE A

2233

PE45321 CAD Drawing

BMA Jack Slide-On Connector Crimp/Solder Attachment 2 Hole Flange
Mount for RG316, RG188, RG174, LMR-100A, PE-C100-LSZH



| STANDARD TOLERANCES | |
|---------------------|-------|
| .X | ±0.2 |
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CAD FILE 022717
SCALE N/A
SIZE A
2233



SMA Male Connector Crimp/Crimp 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
- RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch Interface Type
- Crimp/Crimp Attachment
- 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 male connector with crimp/crimp 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 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 |

Mechanical Specifications

Size

| | |
|---------------|---------------------------------|
| Length | 0.87 in [22.1 mm] |
| Width/Dia. | 0.315 in [8.00 mm] |
| Weight | 0.012 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/Crimp Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch PE4003](#)



SMA Male Connector Crimp/Crimp 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 30 µin minimum |
| Insulation | PTFE | |
| Body | Brass | Nickel 100 µin minimum |
| Coupling Nut | Brass | Nickel 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/Crimp 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.

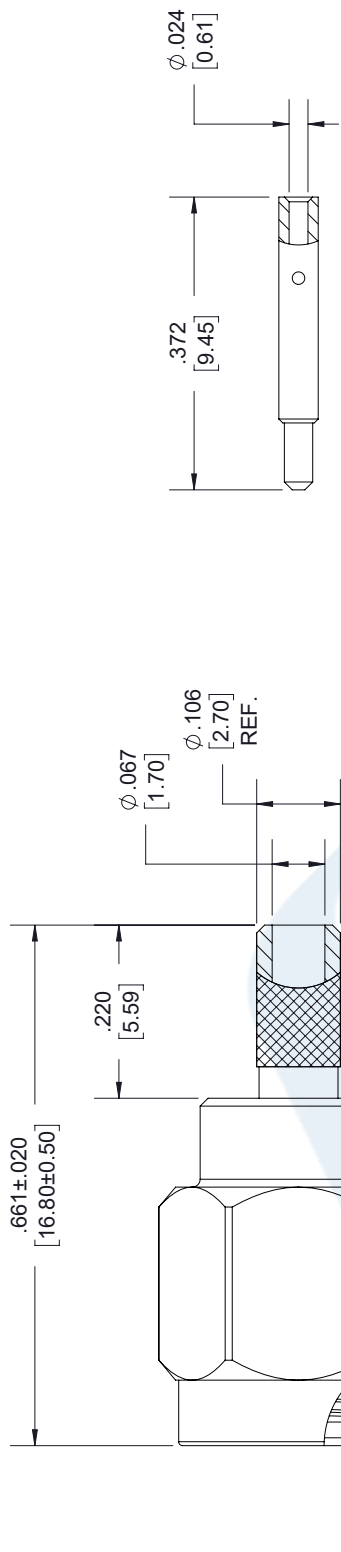
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URL: <https://www.pasternack.com/sma-male-rg174-rg316-lmr-100-pe-b100-pe-c100-connector-pe4003-p.aspx>

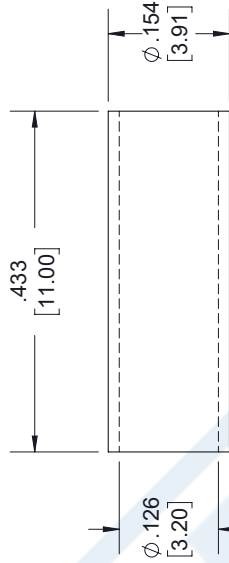
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PE4003 CAD Drawing

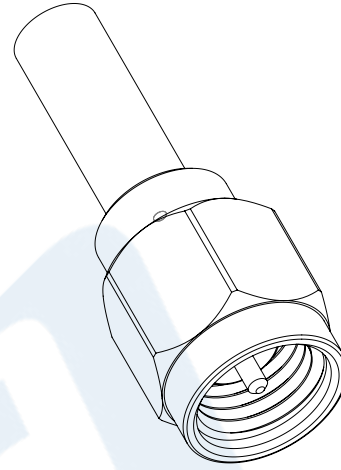
SMA Male Connector Crimp/Crimp Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch



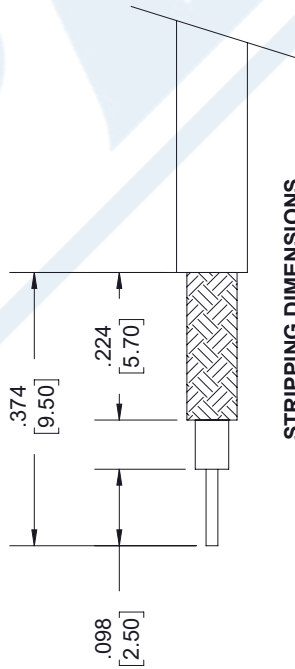
50 Ohm
SMA MALE



FERRULE



CONTACT



STRIPPING DIMENSIONS

- NOTES:
- CABLE ATTACHMENT:
 - OUTER: CRIMP.
 - INNER: SOLDER/CRIMP.
 - CRIMP SIZE REQUIRED:
 - FERRULE: .134 [3.40] HEX. CRIMP TOOL
 - CONTACT: .036 [0.92] SQ. CRIMP TOOL.

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

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

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CAD FILE 11/16/18

SCALE N/A

SIZE A

7361

LMR®-100A

Flexible Low Loss Communications Coax

Ideal for...

- Drop-in Replacement for RG-316/RG-174 (uses standard connectors)
- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable

• **LMR®-PVC** is designed for low loss general-purpose indoor/outdoor applications and is somewhat more flexible than the standard polyethylene jacketed LMR.

• **LMR®-PVC-W** is a white-jacketed version of LMR-PVC for marine and other indoor/outdoor applications where color compatibility is desired.

• **Flexibility** and bendability are hallmarks of the LMR-100A cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.

• **Low Loss** is another hallmark feature of LMR-100A. Size for size LMR has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

• **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).

• **Weatherability:** LMR-100A cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.

• **Connectors:** A wide variety of connectors are available for LMR-100A cable, including all common interface types, reverse polarity, and a choice of solder or non-solder center pins. Most LMR connectors employ crimp outer attachment using standard hex crimp sizes.

• **Cable Assemblies:** All LMR-100A cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

| Part Description | | | | | Stock |
|------------------|--------------------------|--------|-------|-------|-------|
| Part Number | Application | Jacket | Color | Code | |
| LMR-100A-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54037 | |
| LMR-100A-PVC | Indoor/Outdoor | PVC | Black | 54119 | |
| LMR-100A-PVC-W | Indoor/Outdoor | PVC | White | 54200 | |

PVC = Poly Vinyl Chloride; MTO = Made to Order



| Construction Specifications | | | |
|-----------------------------|-------------------|-------|--------|
| Description | Material | In. | (mm) |
| Inner Conductor | Solid BCCS | 0.018 | (0.46) |
| Dielectric | Solid PE | 0.060 | (1.52) |
| Outer Conductor | Aluminum Tape | 0.065 | (1.65) |
| Overall Braid | Tinned Copper | 0.083 | (2.11) |
| Jacket | (see table above) | 0.110 | (2.79) |

| Mechanical Specifications | | | |
|---------------------------|----------------|--------|----------|
| Performance Property | Units | US | (metric) |
| Bend Radius: installation | in. (mm) | 0.25 | (6.4) |
| Bend Radius: repeated | in. (mm) | 1 | (25.4) |
| Bending Moment | ft-lb (N-m) | 0.1 | (0.014) |
| Weight | lb/ft (kg/m) | 0.0092 | (.014) |
| Tensile Strength | lb (kg) | 15 | (6.8) |
| Flat Plate Crush | lb/in. (kg/mm) | 10 | (0.18) |

| Environmental Specifications | | | |
|--------------------------------|----------|---------|--|
| Performance Property | °F | °C | |
| Installation Temperature Range | -40/+185 | -40/+85 | |
| Storage Temperature Range | -94/+185 | -70/+85 | |
| Operating Temperature Range | -40/+185 | -40/+85 | |

| Electrical Specifications | | | |
|---------------------------|-------------------|-------|----------|
| Performance Property | Units | US | (metric) |
| Velocity of Propagation | % | 66 | |
| Dielectric Constant | NA | 2.30 | |
| Time Delay | nS/ft (nS/m) | 1.54 | (5.05) |
| Impedance | ohms | 50 | |
| Capacitance | pF/ft (pF/m) | 30.8 | (101.1) |
| Inductance | uH/ft (uH/m) | 0.077 | (0.25) |
| Shielding Effectiveness | dB | >90 | |
| DC Resistance | | | |
| Inner Conductor | ohms/1000ft (/km) | 81.0 | (266) |
| Outer Conductor | ohms/1000ft (/km) | 9.5 | (31.2) |
| Voltage Withstand | Volts DC | 500 | |
| Jacket Spark | Volts RMS | 2000 | |
| Peak Power | kW | 0.6 | |

Attenuation vs. Frequency (typical)



| Frequency (MHz) | 30 | 50 | 150 | 220 | 450 | 900 | 1500 | 1800 | 2000 | 2500 | 5800 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Attenuation dB/100 ft | 3.9 | 5.1 | 8.9 | 10.9 | 15.8 | 22.8 | 30.1 | 33.2 | 35.2 | 39.8 | 64.1 |
| Attenuation dB/100 m | 12.9 | 16.7 | 29.4 | 35.8 | 51.9 | 74.9 | 98.7 | 109.0 | 115.5 | 130.6 | 210.3 |
| Avg. Power kW | 0.230 | 0.180 | 0.100 | 0.083 | 0.057 | 0.039 | 0.029 | 0.027 | 0.025 | 0.022 | 0.013 |

Calculate Attenuation = $(0.709140) \cdot \sqrt{\text{FMHz}} + (0.001740) \cdot \text{FMHz}$ (interactive calculator available at <http://www.timesmicrowave/telecom>)
Attenuation: VSWR=1.0 ; Ambient = +25°C (77°F) **Power:** VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F);
 Sea Level; dry air; atmospheric pressure; no solar loading



Connectors

| Interface | Description | Part Number | Stock Code | VSWR ** Freq. (GHz) | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* Body /Pin | Length in | Width in (mm) | Weight lb (g) |
|-----------|---------------|-------------|------------|------------------------|-----------------|----------------------------|----------------------------|----------------------|--------------|------------------|------------------|
| SMA male | Straight Plug | TC-100-SM | 3190-1551 | <1.25:1 (<3) | Hex | Solder | Crimp | SS/G | 1.0 (25.4) | 0.32 (8.1) | 0.015 (6.8) |
| TNC male | Straight Plug | TC-100-TM | 3190-1552 | <1.25:1 (<3) | Knurl | Solder | Crimp | S/G | 1.4 (35.6) | 0.59 (15.0) | 0.045 (20.4) |

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy **VSWR spec based on 3 foot cable with a connector pair



Install Tools

| Type | Part Number | Stock Code | Description |
|-------------------|--------------------|------------|---|
| Crimp Tool | CT-240/200/195/100 | 3190-667 | Crimp tool for LMR-100, 195, 200 and 240 connectors |
| Cutting Tool | CCT-01 | 3190-1544 | Cable end flush cut tool |
| Replacement Blade | RB-01 | 3190-1609 | Replacement blade for cutting tool |

