



SMA Female Connector Clamp/Solder Attachment 4 Hole Flange For RG316, RG174, RG188, .340 inch Hole Spacing

TECHNICAL DATA SHEET

PE4034

SMA Female Connector Clamp/Solder Attachment 4 Hole Flange For RG316, RG174, RG188, .340 inch Hole Spacing

Configuration

| | |
|--|---------------------|
| Connector | SMA Female |
| Connector Specification | MIL-C-39012 |
| Connector Interface Type | RG316, RG174, RG188 |
| Cable Attachment Method (Shield/Contact) | Clamp/Solder |
| Body Style | Straight |
| Mount Method | 4 Hole Flange |

Electrical Specifications

| | |
|-----------------|----|
| Impedance, Ohms | 50 |
|-----------------|----|

Mechanical Specifications

Temperature

| | |
|------------------------|-------------|
| Operating Range, deg C | -65 to +165 |
|------------------------|-------------|

Size

| | |
|---------------------|-------------|
| Length, in [mm] | 0.8 [20.32] |
| Width/Dia., in [mm] | 0.5 [12.70] |
| Height, in [mm] | 0.5 [12.7] |
| Weight, lbs [g] | 0.013 [5.9] |

Connector

| | |
|-------------------------------|---------------|
| Type | SMA Female |
| Contact Material and Plating | Gold |
| Contact Plating Specification | MIL-G-45204 |
| Body Material and Plating | Brass, Nickel |
| Dielectric Type | Teflon |

Compliance Certifications (visit www.Pasternack.com for current document)

| | |
|----------------|-----|
| RoHS Compliant | Yes |
|----------------|-----|

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Clamp/Solder Attachment 4 Hole Flange For RG316, RG174, RG188, .340 inch Hole Spacing PE4034](#)

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.



SMA Female Connector Clamp/Solder Attachment 4 Hole
Flange For RG316, RG174, RG188, .340 inch Hole Spacing

TECHNICAL DATA SHEET

PE4034

Plotted and Other Data

Notes:

Values at 25 °C, sea level

SMA Female Connector Clamp/Solder Attachment 4 Hole Flange For RG316, RG174, RG188, .340 inch Hole Spacing from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

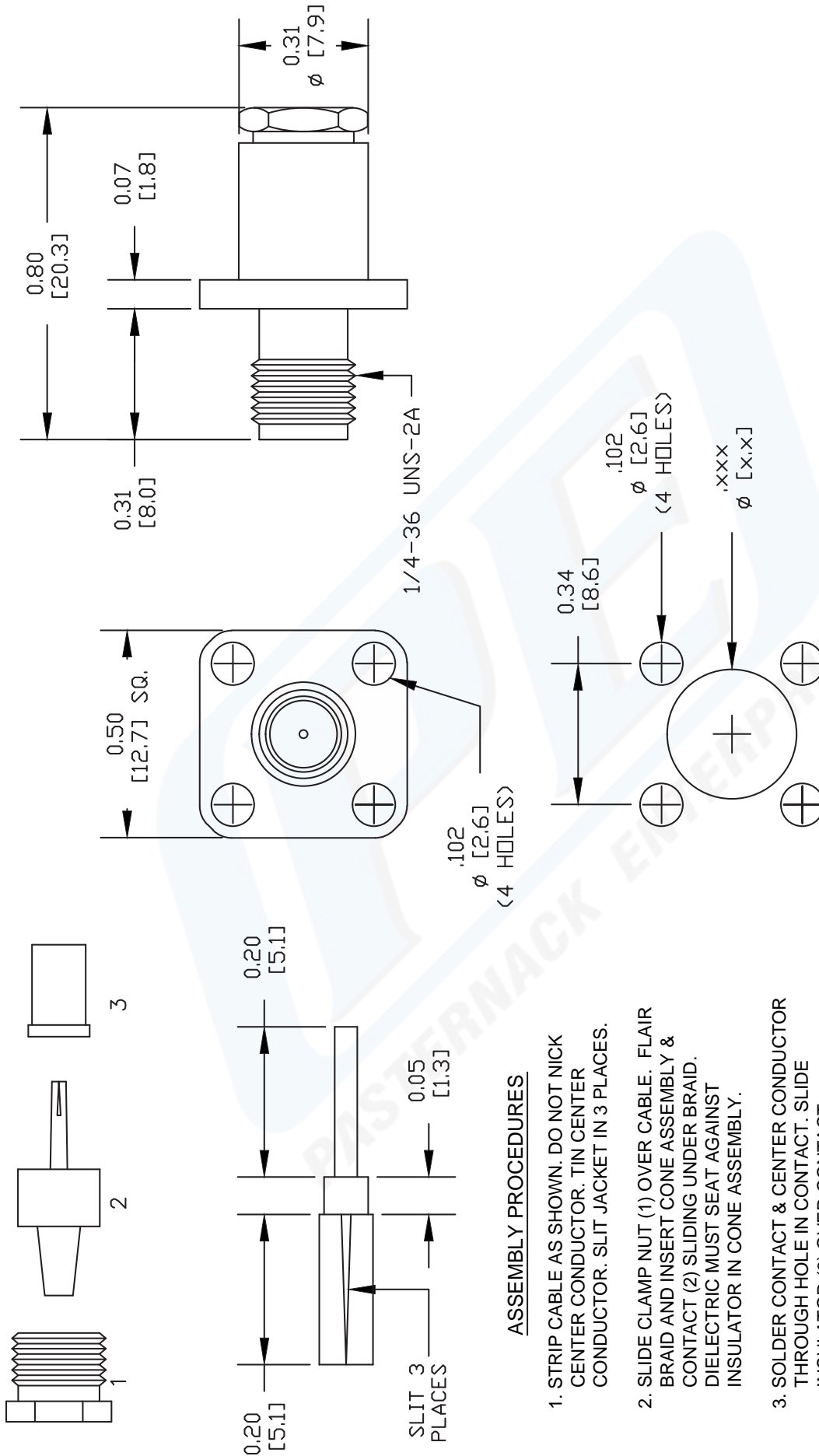
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PE4034 CAD Drawing

SMA Female Connector Clamp/Solder Attachment 4 Hole Flange
For RG316, RG174, RG188, .340 inch Hole Spacing



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR. TIN CENTER CONDUCTOR. SLIT JACKET IN 3 PLACES.
2. SLIDE CLAMP NUT (1) OVER CABLE. FLAIR BRAID AND INSERT CONE ASSEMBLY & CONTACT (2) SLIDING UNDER BRAID. DIELECTRIC MUST SEAT AGAINST INSULATOR IN CONE ASSEMBLY.
3. SOLDER CONTACT & CENTER CONDUCTOR THROUGH HOLE IN CONTACT. SLIDE INSULATOR (3) OVER CONTACT.
4. INSTALL CABLE ASSEMBLY INTO BODY & TIGHTEN.

MOUNTING HOLES

DWG TITLE

PE4034

- 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. A

FSCM NO. 53919

CAD FILE 070611

SCALE N/A

SIZE A

2231



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SMP Female Right Angle Push-On Connector Crimp/ Solder Attachment for RG316, RG174, LMR-100

RF Connectors Technical Data Sheet

PE45128

Configuration

- Push-On SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG316, RG174, LMR-100 Interface Type
- Crimp/Solder Attachment

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 3 | GHz |
| VSWR | | | 1.3:1 | |
| Operating Voltage (AC) | | | 350 | Vrms |

Mechanical Specifications

Size

| | |
|------------|----------------------|
| Length | 0.295 in [7.49 mm] |
| Width/Dia. | 0.157 in [3.99 mm] |
| Height | 0.311 in [7.9 mm] |
| Weight | 0.00736 lbs [3.34 g] |

Material Specifications

| Description | Material | Plating |
|-----------------|------------------|-------------------------|
| Contact | Beryllium Copper | Gold 30µ in. minimum |
| Insulation | Teflon | |
| Outer Conductor | Beryllium Copper | Gold 3µ in. minimum |
| Body | Brass | Gold 3µ in. minimum |

Environmental Specifications

Temperature

| | |
|-----------------|------------------|
| Operating Range | -65 to 165 deg C |
|-----------------|------------------|

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Push-On Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45128](#)



SMP Female Right Angle Push-On Connector Crimp/ Solder Attachment for RG316, RG174, LMR-100

RF Connectors Technical Data Sheet

PE45128

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

Plotted and Other Data

Notes:

SMP Female Right Angle Push-On Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 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: [SMP Female Right Angle Push-On Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45128](#)

URL: <https://www.pasternack.com/smp-female-push-on-rg316-rg174-lmr-100-connector-pe45128-p.aspx>

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PE45128 CAD Drawing

SMP Female Right Angle Push-On Connector Crimp/
Solder Attachment for RG316, RG174, LMR-100



ASSEMBLY PROCEDURES

1. STRIP THE CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. SLIDE FERRULE ONTO THE CABLE.
3. FLARE THE BRAID, INSERT THE CONTACT AND SOLDER TO INTERNAL CONTACT.
4. SLIDE FERRULE OVER BRAID AND CRIMP WITH .130" [3.3] HEX. CRIMP TOOL.
5. INSERT THE INSULATION AND THE CAP.

DWG TITLE

PE45128

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3. DIMENSIONS ARE IN INCHES [mm].

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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FSCM NO. 53919

CAD FILE 021015

SCALE N/A

SIZE A

200

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 (mm) | 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 |

