



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

RF Connectors Technical Data Sheet

PE45368

Configuration

- SSMC Plug Connector
- 50 Ohms
- Straight Body Geometry

- LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- 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 PE45368 SSMC plug connector with crimp/solder attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR and RG316 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 1.5:1.

Our SSMC plug connector PE45368 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			1.5:1	
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 Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 PE45368](#)



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

RF Connectors Technical Data Sheet

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Mechanical Specifications

Size

Length

0.7 in [17.78 mm]

Width/Dia.

0.156 in [3.96 mm]

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	Beryllium Copper	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45206
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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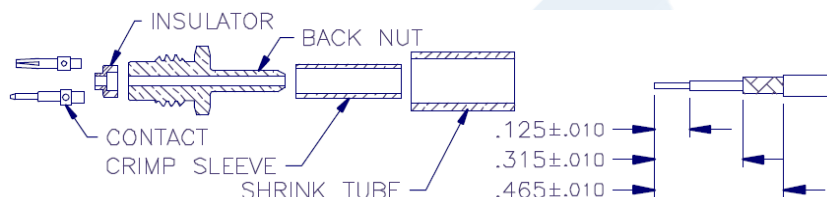
SSMC Plug Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100- LSZH, PE-B100, LMR-100A-FR, RG316

RF Connectors Technical Data Sheet

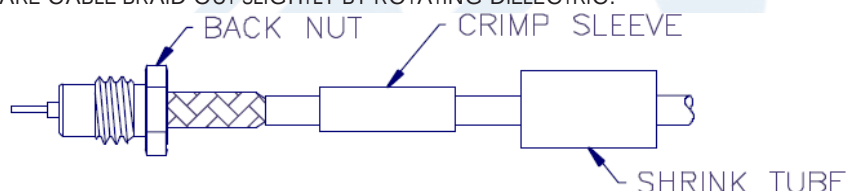
PE45368

Assembly Instruction

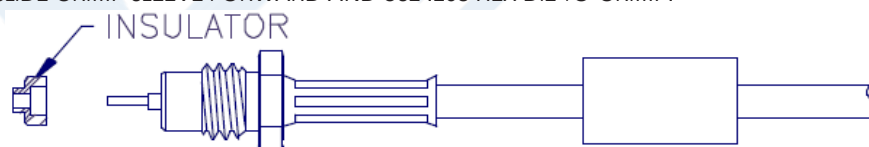
Assembly Instructions



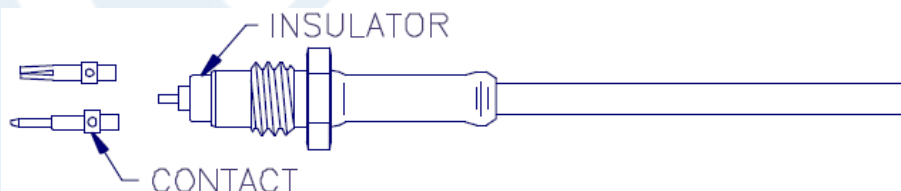
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE INTO TAIL-END OF BACK NUT, MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF NUT.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP.



6. POSITION INSULATOR OVER CABLE DIELECTIC AND CENTER CONDUCTOR.



7. SOLDER CONTACT TO CENTER CONDUCTOR.
8. INSERT CABLE ASSEMBLY INTO BODY AND TIGHTEN NUT WITH A TORQUE WRENCH WITH A TORQUE OF 35-45 INCH-OUNCES.
9. 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 Connector Crimp/Solder Attachment for LMR-100A, RG188, RG174, PE-C100-LSZH, PE-B100, LMR-100A-FR, RG316 PE45368](#)



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

RF Connectors Technical Data Sheet

PE45368

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

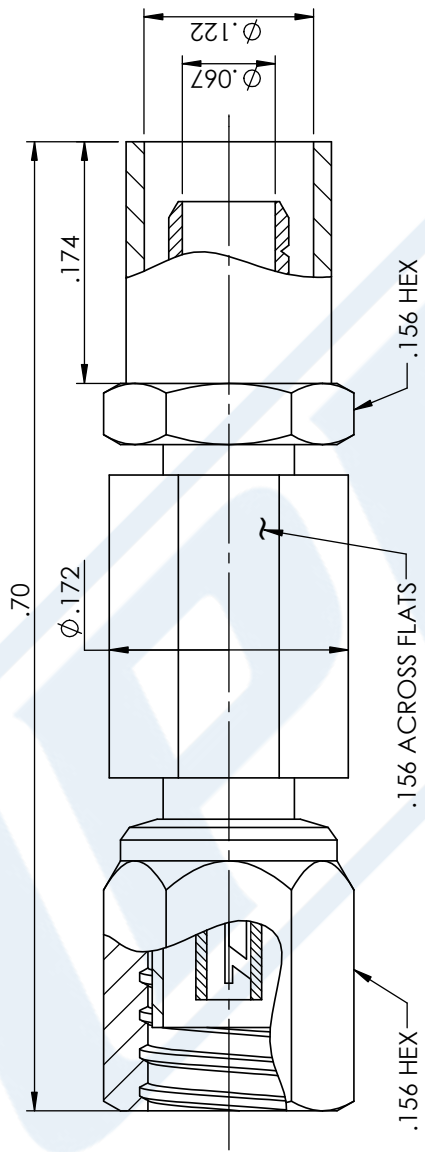
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URL: <https://www.pasternack.com/ssmc-plug-lmr-100a-rg188-pe-c100-lszh-pe-b100-connector-pe45368-p.aspx>

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.

PE45368 CAD Drawing

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



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

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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DWG TITLE	PE45368
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	052217	SCALE	N/A	SIZE	A	GF0006
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SMA Male Connector Crimp/Solder (Captive Contact) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



PE4589

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 3 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4589 , 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 3 GHz and offers good VSWR of 1.3:1.

Our SMA male connector PE4589 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			1.3:1	
Operating Voltage (AC)			335	Vrms
Impedance		50		Ohms

Mechanical Specifications

Size

Length	1.06 in [26.92 mm]
Width	0.312 in [7.92 mm]
Weight	0.018 lbs [8.16 g]
Mating Torque	3 to 5 in-lbs [[0.34 to 0.57 Nm]]

SMA Male Connector Crimp/Solder (Captive Contact) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



PE4589

Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum

Environmental Specifications

Temperature Operating Range	-65 to +165 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

SMA Male Connector Crimp/Solder (Captive Contact) 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.

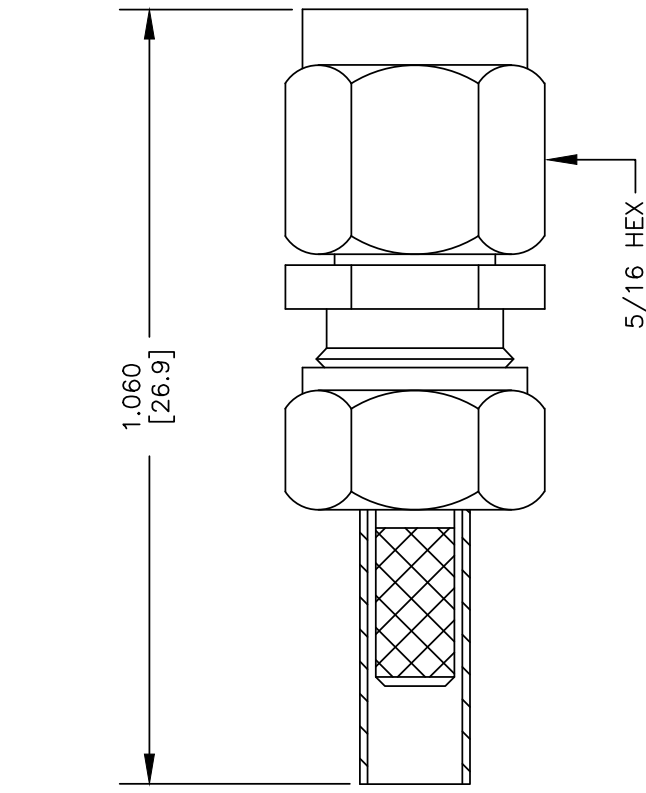
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder \(Captive Contact\) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4589](#)

URL: <https://www.pasternack.com/sma-male-standard-rg174-rg316-rg188-connector-pe4589-p.aspx>

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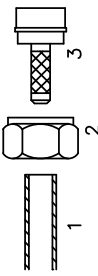
PE4589 CAD Drawing

SMA Male Connector Crimp/Solder (Captive Contact) Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



STRIPPING DIMENSIONS
ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. SO NOT NICK THE CENTER CONDUCTOR. TIN CENTER CONDUCTOR.
2. SLIDE FERRULE (1) & CLAMP NUT (2) OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY (3) UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR. SLIDE FERRULE (1) OVER BRAID & AGAINST CLAMP NUT. CRIMP FERRULE (1)
3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



CRIMP SIZE REQUIRED

CONTACT: SOLDER
FERRULE: .128" HEX CRIMP TOOL



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DWG TITLE

PE4589

FSCM NO. 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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

CAD FILE 120804

SCALE N/A

SIZE A

XXXX

Low Loss Flexible LMR-100A-UF Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket Ultra Flex



LMR-100A-UF

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
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-UF Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket Ultra Flex



LMR-100A-UF

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, 7 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]

Environmental Specifications

Temperature	
Operating Range	-40 to +85 deg C
Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

Low Loss Flexible LMR-100A-UF Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket Ultra Flex



LMR-100A-UF

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

Plotted and Other Data

Notes:

Low Loss Flexible LMR-100A-UF Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket Ultra Flex 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-UF Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket Ultra Flex 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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Low Loss Flexible LMR-100A-UF Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket Ultra Flex

