



RA SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable

RA SSMC plug connector with crimp/solder attachment for RG316, RG174, RG188, LMR-100A and LMR-100A-FR, part number FMCN1297, from Fairview Microwave is in-stock and ships same day. This 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 facilitates connections in tight spaces.

Fairview's RA SSMC plug connector FMCN1297 datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

| Description | Min | Тур | Max | 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 Cond. DC Resistanc | e | | 4 | mOhms |
| Outer Cond. DC Resistance | e | | 1 | mOhms |
| Insulation Resistance | 1,000 | | | MOhms |
| RF Leakage | -50 | | | dB |

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

Material Specifications

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

Nm1



Configuration:

- SSMC Plug Connector
- · Right Angle Body Geometry
- RG316, RG174, RG188, LMR-100A, LMR-100A-FR Interface Type
- Crimp/Solder Attachment

Features:

- Operating Frequency of 12.4 GHz Max.
- Good VSWR of 1.62:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Small SSMC connector form factor (50% smaller than SMA, radially)
- Reliable threaded coupling
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

Applications:

- · General Purpose Test
- · Custom Cable Assemblies
- Software defined radio (SDR)
- Avionics
- A/D Modules
- Ultra Wideband Digital Receivers

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| Coupling Nut | Beryllium Copper | Gold MIL-G-45204 | |
|--------------|------------------|---------------------|--|
| Crimp Sleeve | Brass | Gold MIL-G-45204 | |

Environmental Specifications

Temperature

Operating Range

Shock Vibration

Salt Spray

-65 to +165 deg C

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

Method 204, Condition D (20G)

Method 101, Condition B, 5% salt solution

Compliance Certifications (see product page for current document)

Plotted and Other Data

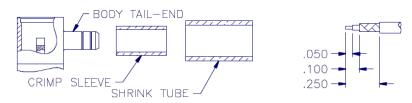
Notes:



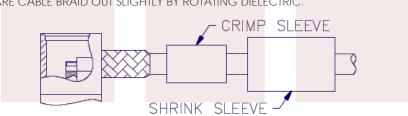


Assembly Instruction

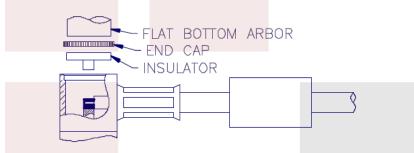
Assembly Instructions



- 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.
- 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.





RA SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

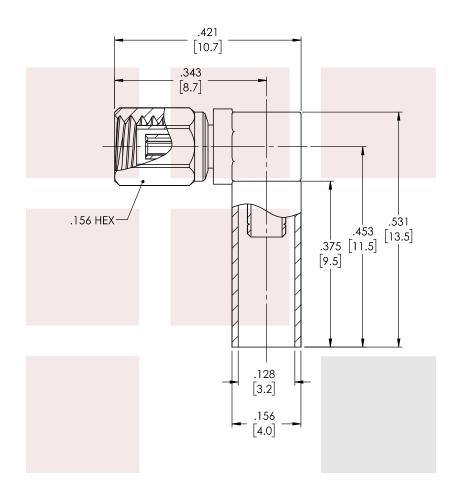
For additional information on this product, please click the following link: RA SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable FMCN1297

URL: https://www.fairviewmicrowave.com/ssmc-plug-rg316-rg174-rg188-lmr-100a-lmr-100a-fr-connector-fmcn1297-p. aspx









STANDARD TOLERANCES

X ±0.2 XX ±0.01 XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

| FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM | 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]. | | | |
|---|---|-------|-----------------|---------------|
| RA SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable | DWG NO FMCN1297 | | CAGE CODE 3FKR5 | |
| | CAD FILE 08/13/18 | SHEET | SCAL | LE N/A SIZE A |