

# FMCN1291 DATA SHEET

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

SSMC plug connector with crimp/solder attachment for RG316, RG174, RG188, LMR-100A and LMR-100A-FR, part number FMCN1291, 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 1.5:1.

Fairview's SSMC plug connector FMCN1291 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	1.5:1			
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage			400	Vrms
5 MHz				
Inner Cond. DC Resistance	e		4	mOhms
Outer Cond. DC Resistance	e		1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	-50			dB

# **Mechanical Specifications**

Size

Length 0.7 in [17.78 mm] Width/Dia. 0.156 in [3.96 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 MIL-G-45204		
Insulation	Teflon			
Body	Beryllium Copper	Gold MIL-G-45204		
Coupling Nut	Beryllium Copper	Gold MII -G-45206		



# **Configuration:**

- SSMC Plug Connector
- 50 Ohms
- Straight 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 1.5:1
- 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

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Crimp Sleeve Brass Gold MIL-G-45204

### **Environmental Specifications**

#### **Temperature**

Operating Range Shock Vibration -65 to +165 deg C

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

Method 204, Condition D (20G)

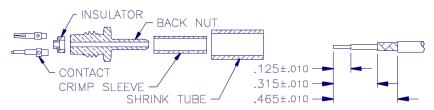
Salt Spray		Method 101, Condition	B, 5% salt solution
Compliance Certificati	ons (see product p	page for current documer	t)
Plotted and Other Dat Notes:	a		



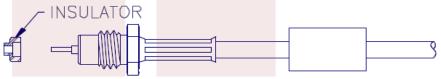


#### **Assembly Instruction**

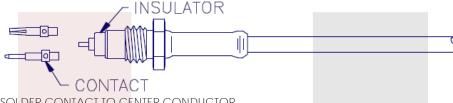
#### Assembly Instructions



- 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. CRIMP SLEEVE BACK NUT SHRINK TUBE
- 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.128" HEX DIE TO CRIMP.



6. POSITION INSULATOR OVER CABLE DIELECTIC AND CENTER CONDUCTOR.



- 7. SOLDER CONTACT TO CENTER CONDUCTOR.
- 8. INSERT CAABLE 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.

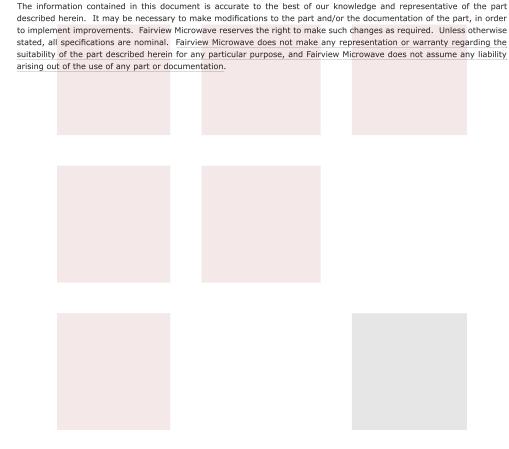




SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave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

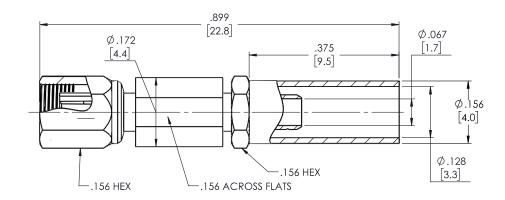
For additional information on this product, please click the following link: SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable FMCN1291

URL: https://www.fairviewmicrowave.com/ssmc-plug-rg316-rg174-rg188-lmr-100a-lmr-100a-fr-connector-fmcn1291-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].			
SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188, LMR-100A, LMR-100A-FR Cable	DWG NO FMCN1291		CAGE CODE 3FKR5	
	CAD FILE 08/09/18	SHEET	SCAL	LE N/A SIZE A