

# FMCN1296 DATA SHEET

# RA SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 Cable

RA SSMC plug connector with crimp/solder attachment for RG178 and RG196, part number FMCN1296, 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 1.57:1. Its right angle body geometry facilitates connections in tight spaces.

Fairview's RA SSMC plug connector FMCN1296 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			1.57:1	
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage 5 MHz			400	Vrms
Inner Cond. DC Resistance	e		4	mOhms
Outer Cond. DC Resistance	е		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 Nm]

#### **Material Specifications**

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



# **Configuration:**

- SSMC Plug Connector
- Right Angle Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

#### **Features:**

- Operating Frequency of 12.4 GHz Max.
- Good VSWR of 1.57:1
- 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
- Data Acquisition
- RADAR/SONAR

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





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

#### **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** 

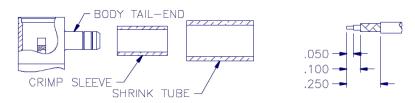
Notes:



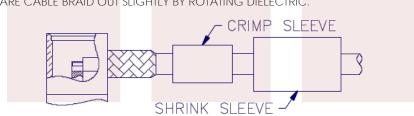


#### **Assembly Instruction**

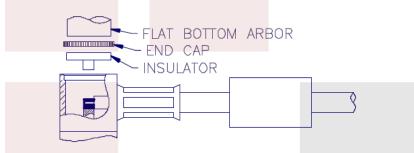
#### Assembly Instructions



- 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 .100" 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 RG178, RG196 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.

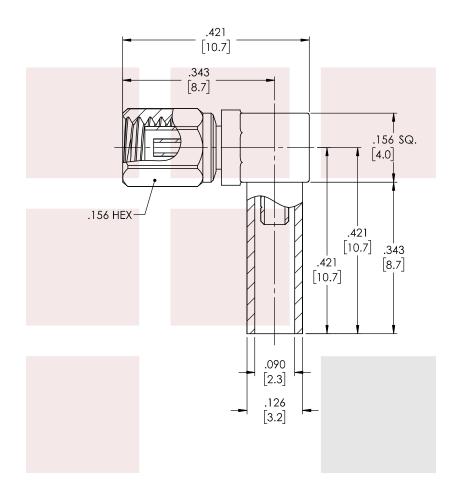
For additional information on this product, please click the following link: RA SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 Cable FMCN1296

URL: https://www.fairviewmicrowave.com/ssmc-plug-rg178-rg196-connector-fmcn1296-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 RG178, RG196 Cable	DWG NO FMCN1296			CAGE CODE 3FKR5		
	CAD FILE 08/13/18	SHEET	SCAI	LE N/A	SIZE A	CN2245