

## Mini SMP Female Connector Solder Attachment for RG405, RG405 Tinned, .086 SR Cable

Mini SMP female connector with solder attachment for RG405, RG405 Tinned and .086 SR, part number SC5431, from Fairview Microwave is in-stock and ships same day. This Mini SMP female connector operates up to a maximum frequency of 26.5 GHz and offers excellent VSWR of 1.15:1. This blind mate connector is ideal for applications without direct visual or tactile access to the connection point, for example, when two circuit boards need to be mated.

Fairview's Mini SMP female connector SC5431 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	Typ	Max	Units
Frequency Range	DC		26.5	GHz
VSWR			1.15:1	

### Mechanical Specifications

Size	
Length	0.29 in [7.37 mm]
Width/Dia.	0.125 in [3.18 mm]
Weight	0.0007 lbs [0.32 g]

### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold MIL-G-45204

### Environmental Specifications

Temperature	
Operating Range	-65 to +165 deg C

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

### Plotted and Other Data

Notes:



### Configuration:

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- RG405, RG405 Tinned, .086 SR Interface Type
- Solder Attachment

### Features:

- Operating Frequency of 26.5 GHz Max.
- Excellent VSWR of 1.15:1
- Blind Mate Connector
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

### Applications:

- General Purpose Test
- Custom Cable Assemblies

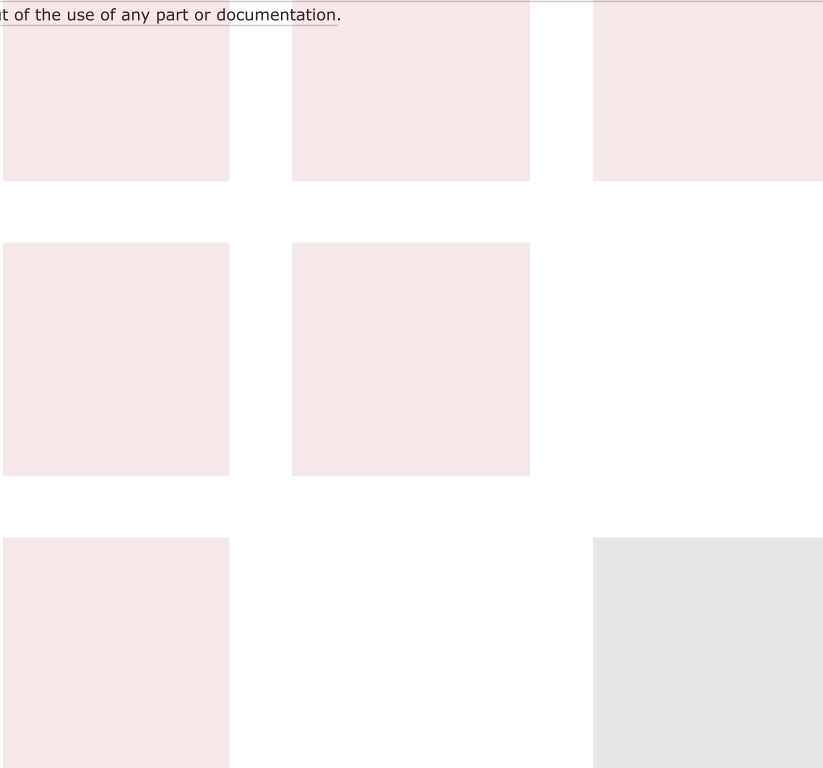
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301 Leora Ln., Suite 100  
Lewisville, TX 75056  
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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

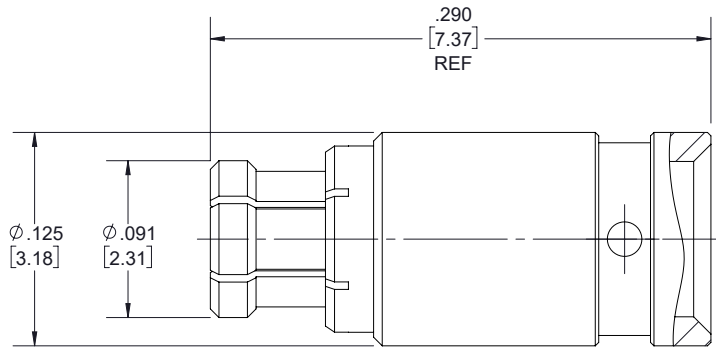
Mini SMP Female Connector Solder Attachment for RG405, RG405 Tinned, .086 SR Cable from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Mini SMP Female Connector Solder Attachment for RG405, RG405 Tinned, .086 SR Cable SC5431](#)

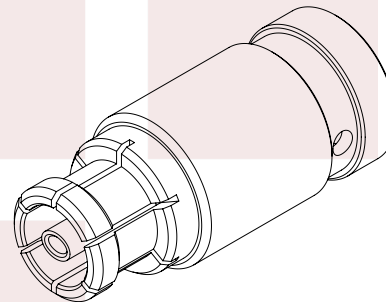
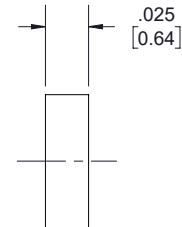
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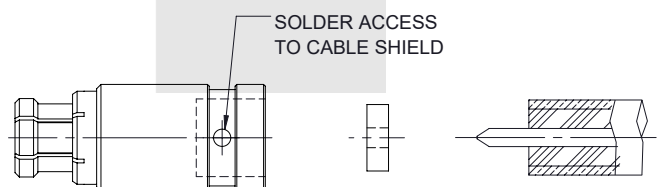
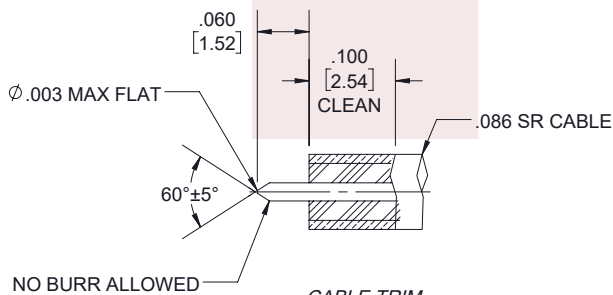
**Mini SMP  
FEMALE**



**ASSEMBLY PROCEDURES:**

1. TRIM CABLE OUTER CONDUCTOR AND DIELECTRIC TO DIMENSION SHOWN, DO NOT NICK CENTER CONDUCTOR.
2. CLEAN CABLE OUTER CONDUCTOR USING FINE GRAIN SANDPAPER OR STEEL WOOL AS SHOWN.

3. SLIDE DIELECTRIC BEAD ONTO CENTER CONDUCTOR UNTIL IT SEATS AGAINST CABLE.
4. FULLY INSTALL CABLE SUBASSEMBLY INTO BODY AND SOLDER IN PLACE. ENSURE THE CABLE JACKET IS AGAINST CABLE STOP PRIOR TO SOLDERING.



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

TITLE

Mini SMP Female Connector Solder Attachment for  
RG405, RG405 Tinned, .086 SR Cable

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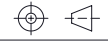
**TOLERANCES:**

.X = ±.2 [5.08] FRACTIONS  
.XX = ±.02 [.51] ± 1/32  
XXX = ±.005 [.13] ANGLES ± 1°

**CABLE LENGTH (L) TOLERANCES:**

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
300 [7620] < L = +5%L / -0

**THIRD-ANGLE PROJECTION**



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY SLI	ITEM NO. SC5431	REV A
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T-Rev.D

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### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		26.5	GHz
VSWR			1.15:1	

### Mechanical Specifications

Size	
Length	0.29 in [7.37 mm]
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### Material Specifications

Description	Material	Plating
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### Environmental Specifications

Temperature	
Operating Range	-65 to +165 deg C

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

### Plotted and Other Data

Notes:



### Configuration:

- Mini SMP Female Connector
- 50 Ohms
- Straight Body Geometry
- RG405, RG405 Tinned, .086 SR Interface Type
- Solder Attachment

### Features:

- Operating Frequency of 26.5 GHz Max.
- Excellent VSWR of 1.15:1
- Blind Mate Connector
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204

### Applications:

- General Purpose Test
- Custom Cable Assemblies

Fairview Microwave  
301 Leora Ln., Suite 100  
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[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
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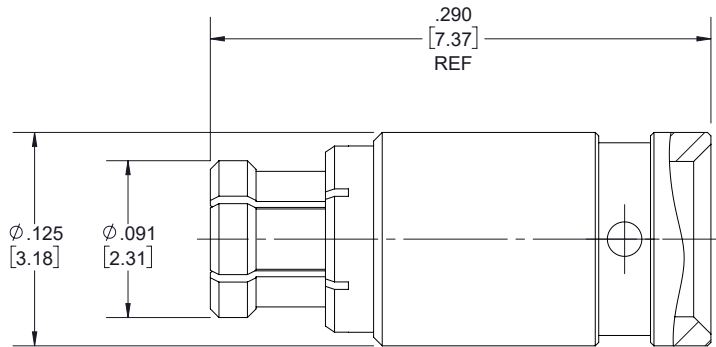
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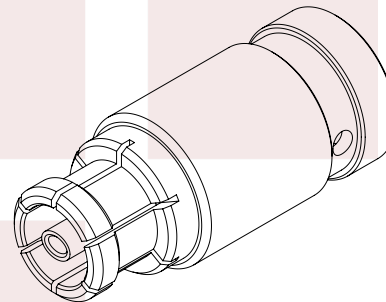
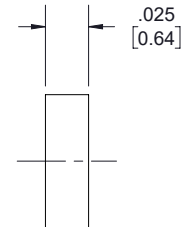
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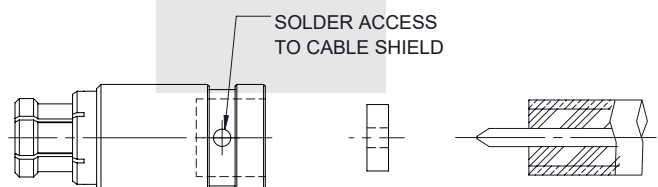
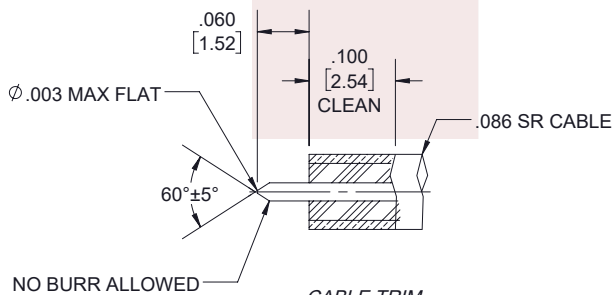
**Mini SMP  
FEMALE**



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2. CLEAN CABLE OUTER CONDUCTOR USING FINE GRAIN SANDPAPER OR STEEL WOOL AS SHOWN.

3. SLIDE DIELECTRIC BEAD ONTO CENTER CONDUCTOR UNTIL IT SEATS AGAINST CABLE.
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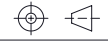
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SHEET 1 OF 1

SCALE N/A

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SIZE A	CAGE CODE 3FKR5	DRAWN BY SLI	ITEM NO. SC5431	REV A
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T-Rev.D

## RG405 Type .086 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Coiled Sections

.086 diameter semi-rigid coaxial cable is the cable of choice for many RF and Microwave engineers. 0.086 cables sometimes referred to as RG405 based on the mil specification for semi-rigid cable of this diameter has a maximum operating frequency of 40 GHz. This form factor is widely used in the RF industry and many connector series and configurations are available for this cable. Because of the solid copper wall design the cable can be formed using proper tooling with a minimum inside bend radius of .12 inches.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
DWV (AC)			5,000	Vrms

### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	1	10	20			GHz
Attenuation, Typ	22 72.18	80 262.47	120 393.7			dB/100ft dB/100m
Power In (CW), Max	130	35	20			Watts

### Mechanical Specifications

Min. Bend Radius (Installation) 0.12 in [3.05 mm]

### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver	0.02 in [0.51 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.066 in [1.68 mm]
Outer Conductor	Copper, Bare	0.087 in [2.21 mm]
Jacket	Tan	

### Environmental Specifications

#### Temperature

Operating Range -55 to +125 deg C

### Compliance Certifications (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant Yes  
 REACH Compliant 12/17/2014

### Configuration:

- Semi-Rigid Cable

### Features:

- Silver Plated Copper Clad Steel center conductor
- PTFE dielectric material
- Bare Copper Outer Conductor
- Operating to 40 GHz
- Minimum inside bend radius of .12 inches
- ROHS compliant

### Applications:

- RF and Microwave Cable Assemblies to 40 GHz
- Preformed cable assemblies to insure fit and layout
- Test Equipment port jumpers

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 1130 Junction Dr. #100  
 Allen, TX 75013  
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[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

## Plotted and Other Data

Notes:

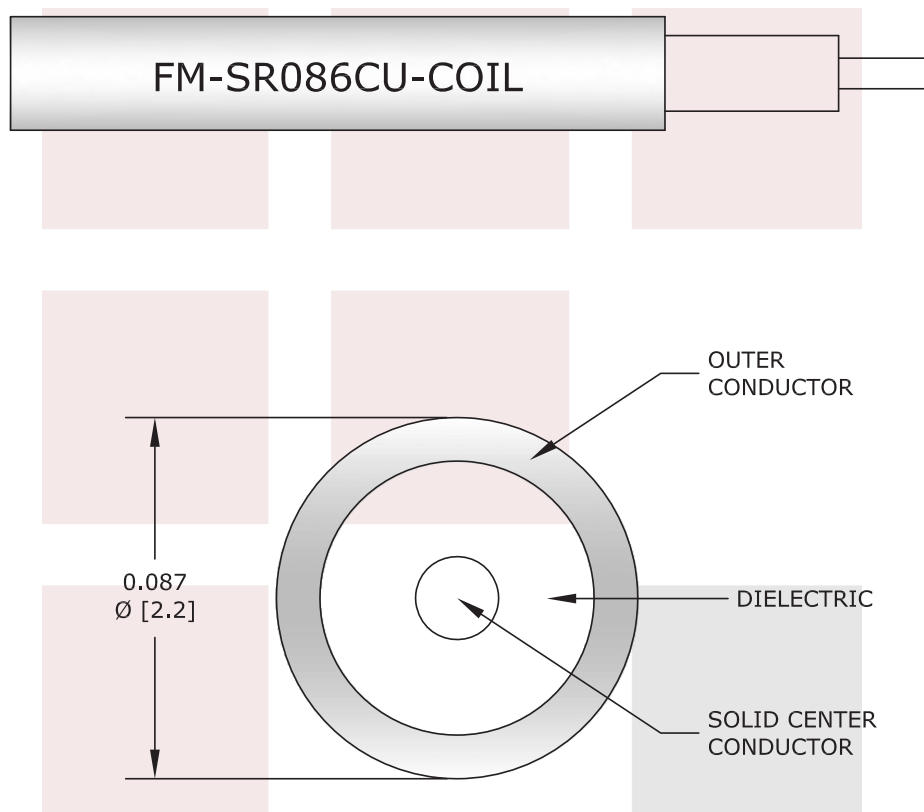
RG405 Type .086 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Coiled Sections from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [RG405 Type .086 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Coiled Sections FM-SR086CU-COIL](#)

URL: <http://www.fairviewmicrowave.com/rg405-type-.086-semi-rigid-coax-cable-copper-fm-sr086cu-coil-p.aspx>

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TITLE RG405 Type .086 Semi-Rigid Coax Cable with a Bare Copper Outer Conductor in Coiled Sections		DWG NO <b>FM-SR086CU-COIL</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	012716	SHEET	SCALE	N/A	SIZE A 2233