

## 3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405

3.5mm male connector with clamp/solder attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN and RG405, part number FMCN1827, from Fairview Microwave is in-stock and ships same day.

Fairview's 3.5mm male connector FMCN1827 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.

### Mechanical Specifications

#### Size

|               |                                  |
|---------------|----------------------------------|
| Length        | 0.94 in [23.88 mm]               |
| Width/Dia.    | 0.312 in [7.92 mm]               |
| Height        | 0.5 in [12.7 mm]                 |
| Weight        | 0.016 lbs [7.26 g]               |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 Nm] |

#### Material Specifications

| Description  | Material                   | Plating                            |
|--------------|----------------------------|------------------------------------|
| Contact      | Beryllium Copper           | Gold over Nickel<br>50 µin minimum |
| Insulation   | PCTFE                      |                                    |
| Body         | Passivated Stainless Steel | SAE-AMS-2700                       |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700                       |

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

### Plotted and Other Data

Notes:



### Configuration:

- 3.5mm Male Connector
- 50 Ohms
- Straight Body Geometry
- FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

### Features:

- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

### Applications:

- General Purpose Test
- Custom Cable Assemblies

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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

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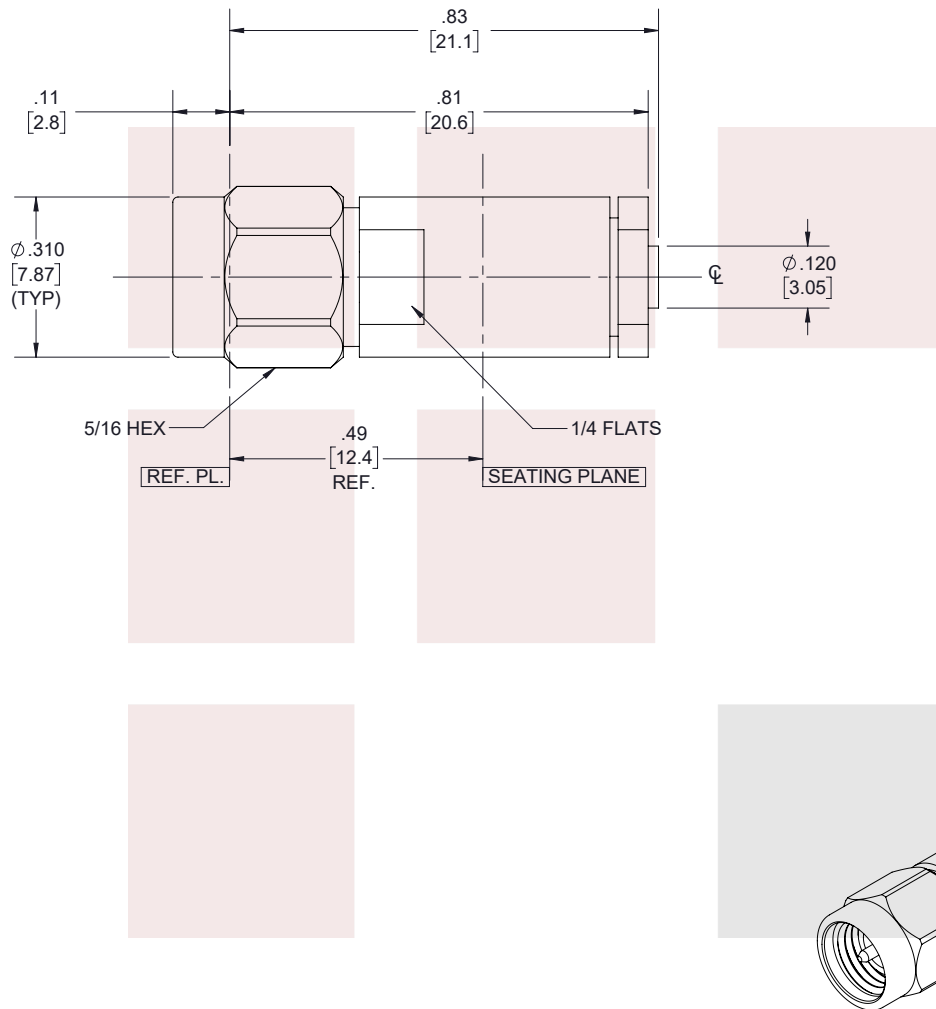
For additional information on this product, please click the following link: [3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 FMCN1827](#)

URL: <https://www.fairviewmicrowave.com/3.5mm-male-fm-sr086altn-fm-sr086tb-fm-sr086tbj-fm-sr086cutn-rg405-connector-fmcn1827-p.aspx>

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| REVISIONS |                 |            |           |
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| REV.      | DESCRIPTION     | DATE       | APPROVED  |
| A         | INITIAL RELEASE | 02/11/2022 | A.GANWANI |



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TITLE

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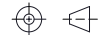
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08] FRACTIONS L ≤ 12 [305] = +1 [25] / -0  
.XX = ±.02 [.51] ± 1/32 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
.XXX = ±.005 [.13] ANGLES ± 1° 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



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SHEET 1 OF 2

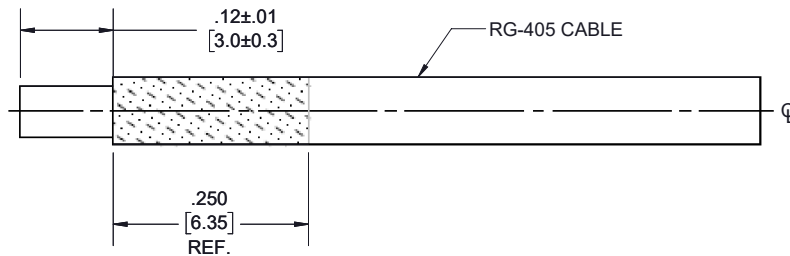
SCALE N/A

| SIZE | CAGE CODE | DRAWN BY  | ITEM NO. | REV |
|------|-----------|-----------|----------|-----|
| A    | 3FKR5     | K.GLEBOVA | FMCN1827 | A   |

T-Rev.D

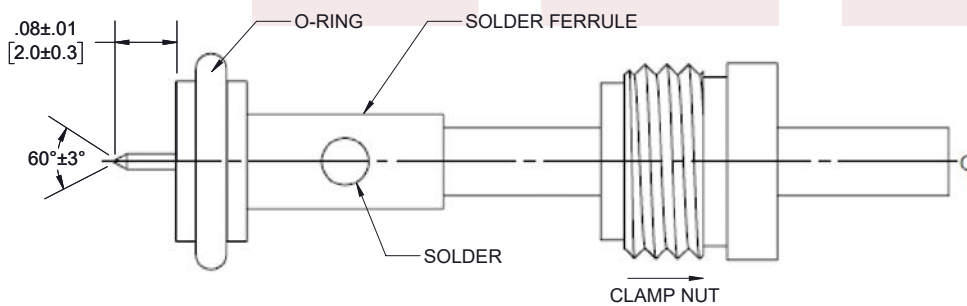
ASSEMBLY PROCEDURES

STEP 1



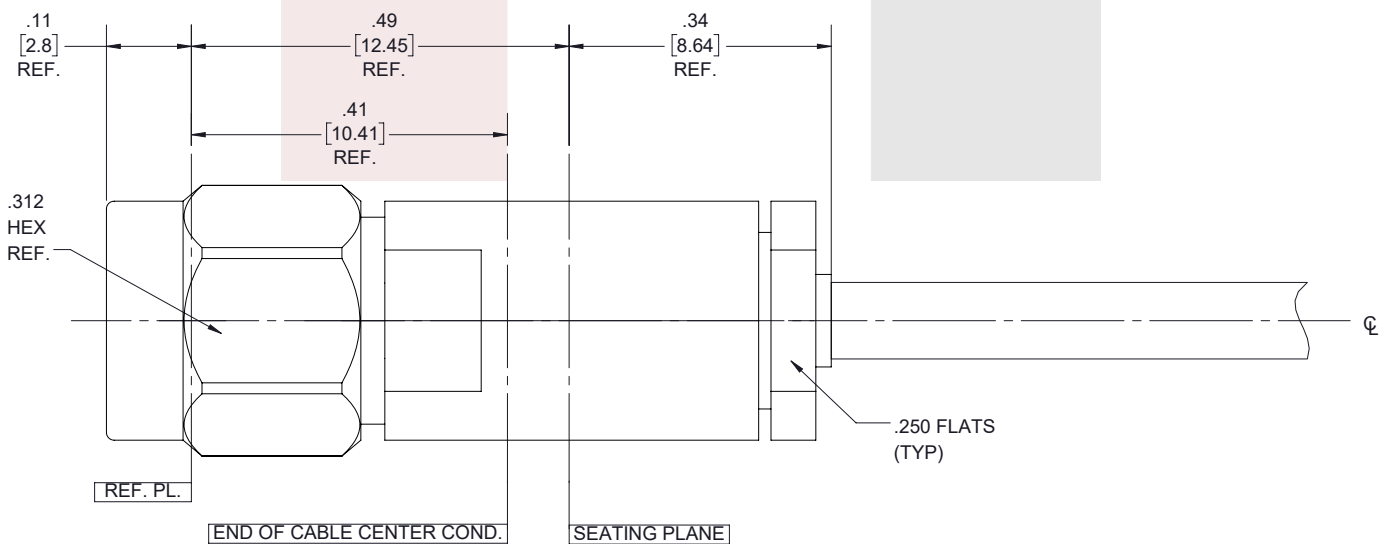
- 1A. TRIM CABLE TO EXPOSE DIELECTRIC CORE AS SHOWN.
- 1B. PRE-TIN CABLE JACKET TO APPROXIMATE DIMENSION SHOWN.

STEP 2



- 2A. SLIDE CLAMP NUT ONTO CABLE IN ORIENTATION SHOWN.
- 2B. INSERT CABLE INTO SOLDER FERRULE UNTIL FULLY SEATED. THEN SOLDER CABLE TO FERRULE WHERE SHOWN.
- 2C. TRIM CABLE DIELECTRIC FLUSH WITH FERRULE FACE (DO NOT SCORE CENTER CONDUCTOR). THEN POINT CENTER CONDUCTOR AS SHOWN.

STEP 3



3.5mm Male Connector Clamp/Solder Attachment for  
FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-  
SR086CUTN, RG405

DISTANCE FROM END OF  
CABLE CENTER COND. TO  
REF PL. IS .410 (REF.)

3. INSERT CABLE SUB-ASSEMBLY INTO CONNECTOR BODY UNTIL SOLDER FERRULE IS SEATED AND TIGHTEN CLAMP NUT TO 25-35 IN. LBS.

## 3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405

3.5mm male connector with clamp/solder attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN and RG405, part number FMCN1827, from Fairview Microwave is in-stock and ships same day.

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### Mechanical Specifications

#### Size

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| Length        | 0.94 in [23.88 mm]               |
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| Weight        | 0.016 lbs [7.26 g]               |
| Mating Torque | 8 to 10 in-lbs [0.90 to 1.13 Nm] |

#### Material Specifications

| Description  | Material                   | Plating                            |
|--------------|----------------------------|------------------------------------|
| Contact      | Beryllium Copper           | Gold over Nickel<br>50 µin minimum |
| Insulation   | PCTFE                      |                                    |
| Body         | Passivated Stainless Steel | SAE-AMS-2700                       |
| Coupling Nut | Passivated Stainless Steel | SAE-AMS-2700                       |

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

### Plotted and Other Data

Notes:



### Configuration:

- 3.5mm Male Connector
- 50 Ohms
- Straight Body Geometry
- FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

### Features:

- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

### Applications:

- General Purpose Test
- Custom Cable Assemblies

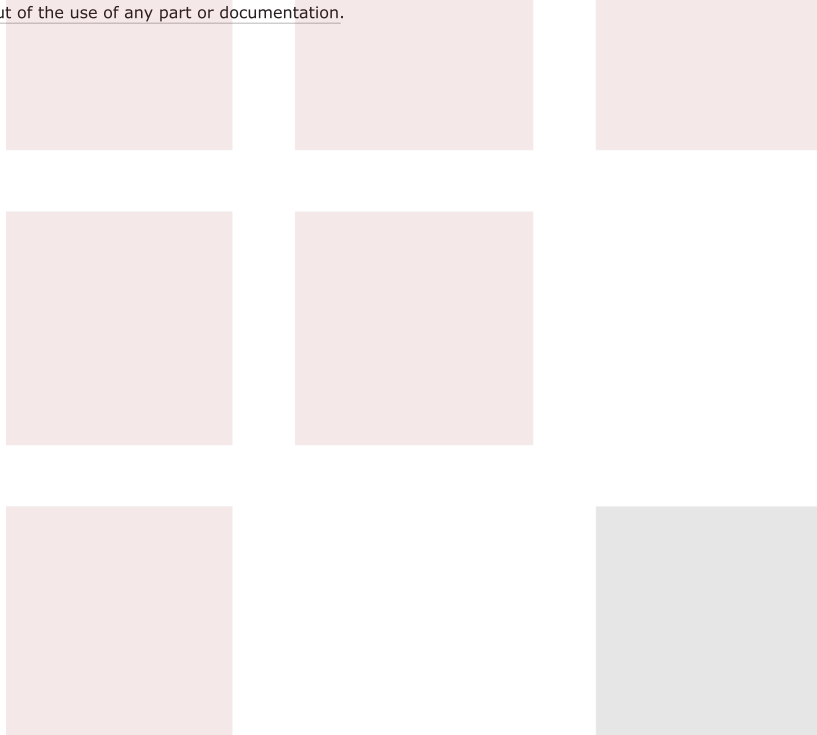
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3.5mm Male Connector Clamp/Solder Attachment for FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405 from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

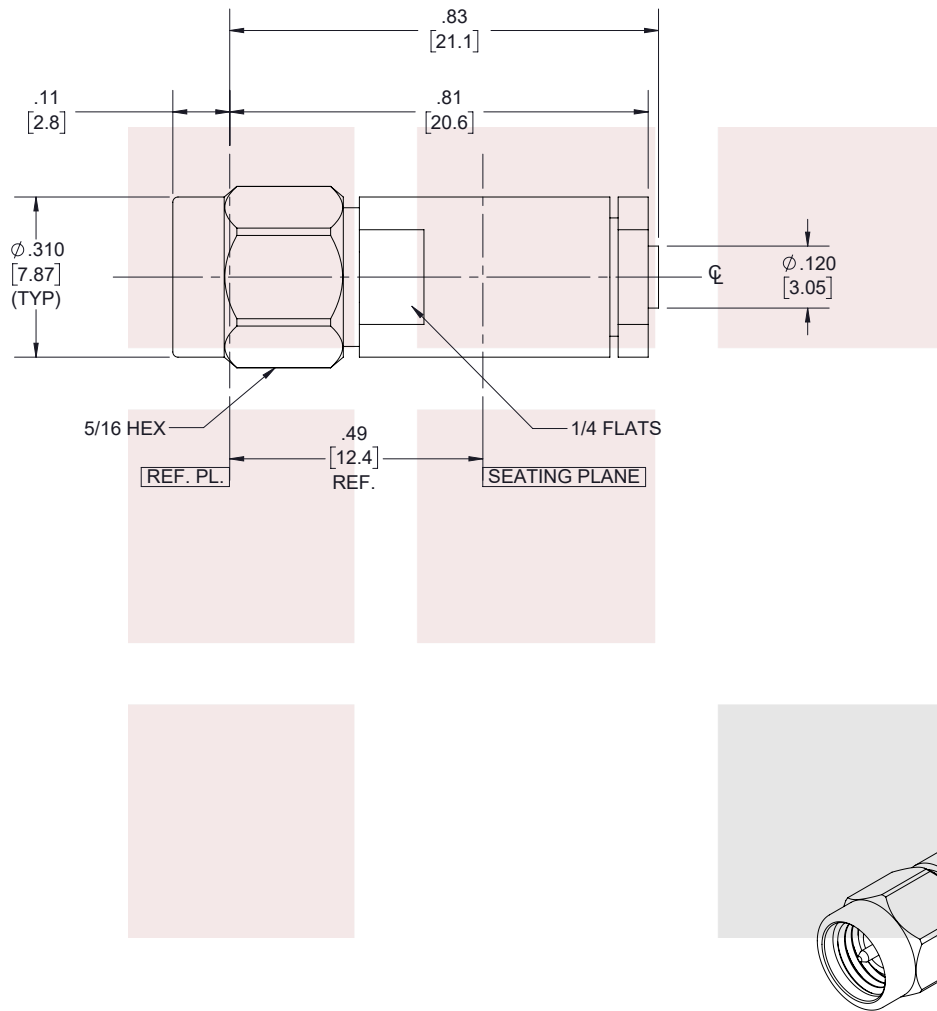
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SR086CUTN, RG405

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TOLERANCES:

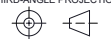
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12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
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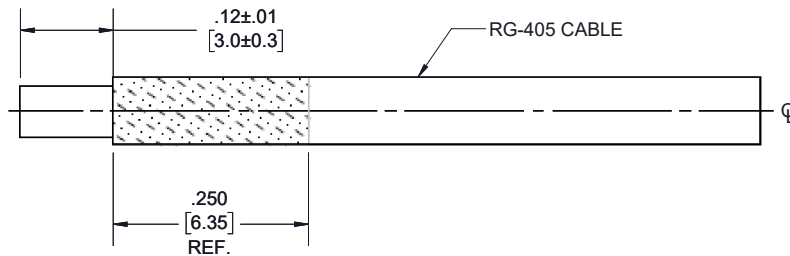
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| SIZE | CAGE CODE | DRAWN BY  | ITEM NO. | REV |
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T-Rev.D

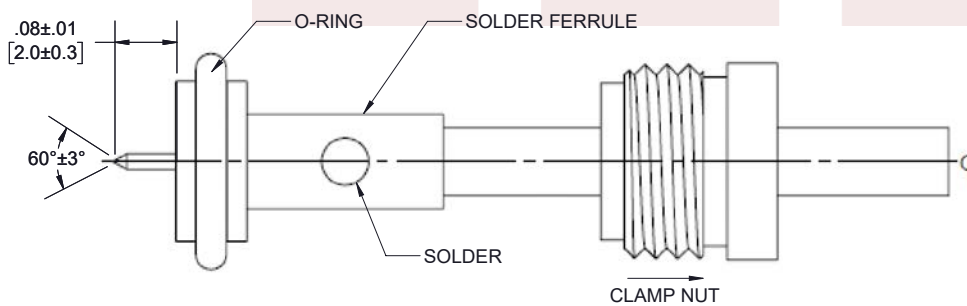
ASSEMBLY PROCEDURES

STEP 1



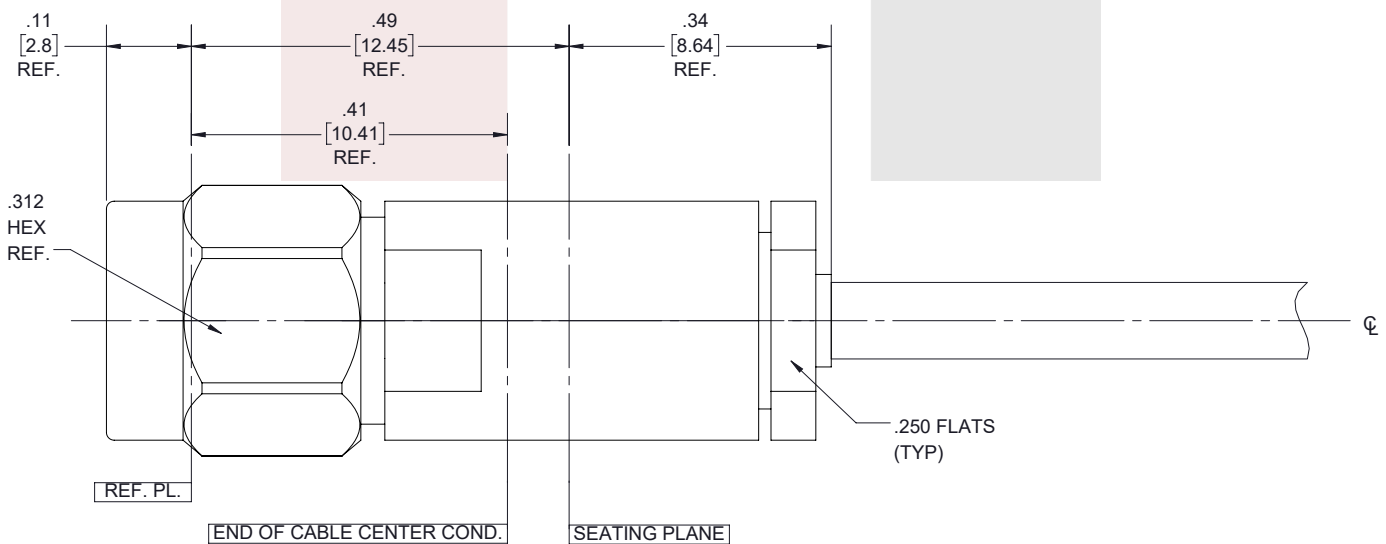
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STEP 2



- 2A. SLIDE CLAMP NUT ONTO CABLE IN ORIENTATION SHOWN.
- 2B. INSERT CABLE INTO SOLDER FERRULE UNTIL FULLY SEATED. THEN SOLDER CABLE TO FERRULE WHERE SHOWN.
- 2C. TRIM CABLE DIELECTRIC FLUSH WITH FERRULE FACE (DO NOT SCORE CENTER CONDUCTOR). THEN POINT CENTER CONDUCTOR AS SHOWN.

STEP 3



3.5mm Male Connector Clamp/Solder Attachment for  
FM-SR086ALTN, FM-SR086TB, FM-SR086TBJ, FM-SR086CUTN, RG405

DISTANCE FROM END OF  
CABLE CENTER COND. TO  
REF PL. IS .410 (REF.)

3. INSERT CABLE SUB-ASSEMBLY INTO CONNECTOR BODY UNTIL SOLDER FERRULE IS SEATED AND TIGHTEN CLAMP NUT TO 25-35 IN. LBS.



## RG405 Type .086 Semi-Rigid Coax Cable with a Tin Plated Aluminum 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 .07 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   | 23<br>75.46 | 81<br>265.75 | 131<br>429.79 |    |    | dB/100ft<br>dB/100m |
| Power In (CW), Max | 130         | 35           | 20            |    |    | Watts               |

### Mechanical Specifications

Min. Bend Radius (Installation) 0.07 in [1.78 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 | Aluminum, Tin             | 0.086 in [2.18 mm] |

### Environmental Specifications

#### Temperature

Operating Range -55 to +125 deg C

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

REACH Compliant 12/17/2014

### Plotted and Other Data

Notes:

### Configuration:

- Semi-Rigid Cable

### Features:

- Silver Plated Copper Clad Steel center conductor
- PTFE dielectric material
- Aluminum Tinned Outer Conductor
- Operating to 40 GHz
- Minimum inside bend radius of .07 inches
- ROHS compliant

### Applications:

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

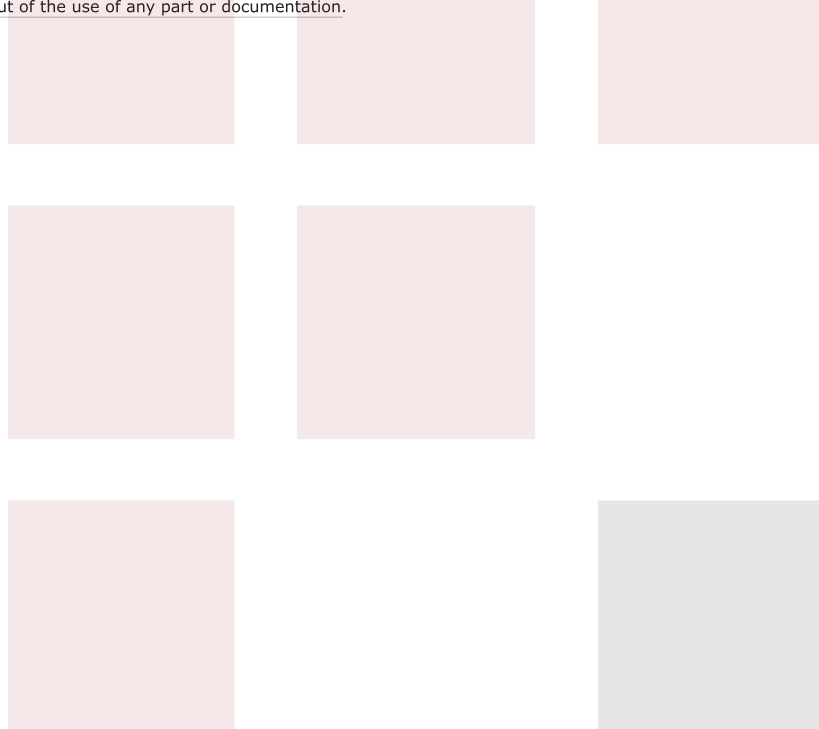
Fairview Microwave  
 1130 Junction Dr. #100  
 Allen, TX 75013  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

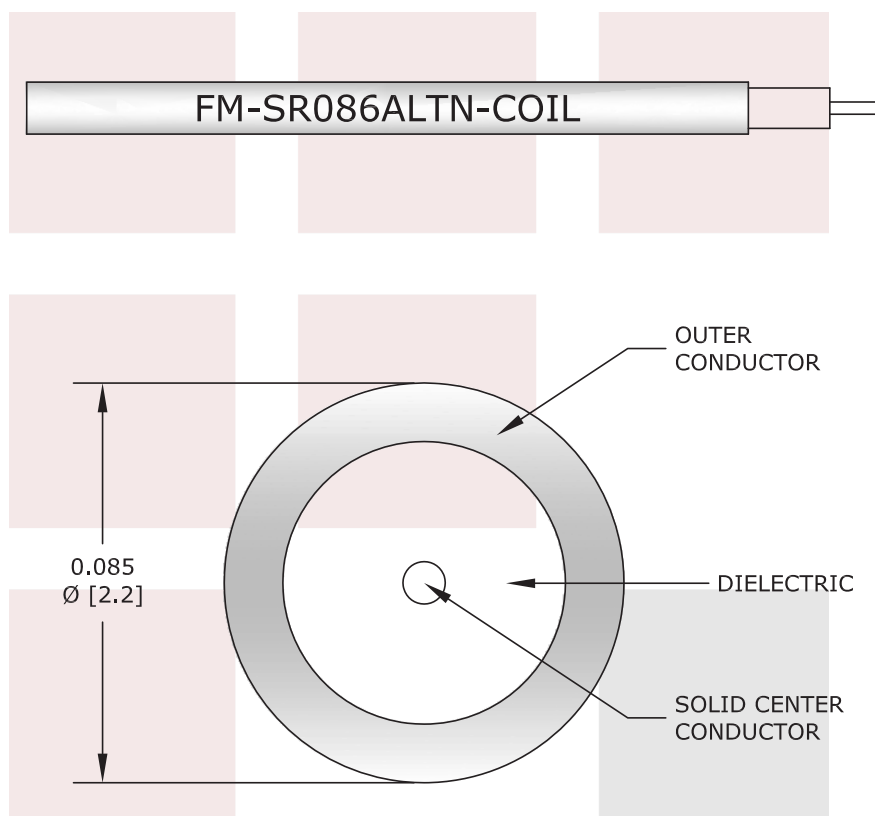
RG405 Type .086 Semi-Rigid Coax Cable with a Tin Plated Aluminum Outer Conductor in Coiled Sections from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the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

Click the following link to obtain additional part information: [RG405 Type .086 Semi-Rigid Coax Cable with a Tin Plated Aluminum Outer Conductor in Coiled Sections FM-SR086ALTN-COIL](#)

URL: <http://www.fairviewmicrowave.com/rg405-type-.086-semi-rigid-coax-cable-tin-plated-aluminum-fm-sr086altn-coil-p.aspx>

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|                                                                                                                 |                             |                                                                                                                                                                                     |                    |           |      |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------|------|
| <b>FAIRVIEW MICROWAVE INC.</b><br>ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM                                     |                             | NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |                    |           |      |
| TITLE<br>RG405 Type .086 Semi-Rigid Coax Cable with a Tin<br>Plated Aluminum Outer Conductor in Coiled Sections | DWG NO<br>FM-SR086ALTN-COIL |                                                                                                                                                                                     | CAGE CODE<br>3FKR5 |           |      |
|                                                                                                                 | CAD FILE<br>012716          | SHEET                                                                                                                                                                               | SCALE<br>N/A       | SIZE<br>A | 2233 |