

QMA Male Connector Solder Attachment for FM-SR086ALTN, FM-SR086TB, RG405



FMCN1887

Configuration

- QMA Male Connector
- 50 Ohms
- Straight Body Geometry
- Solder/Solder Method
- Connector Interface Types: FM-SR086ALTN, FM-SR086TB, RG405

Features

- Operating Frequency of 18 GHz Max.
- PIM levels better than -130 dBc
- Gold Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

QMA Male Standard Connector Solder/Solder Attachment for FM-SR086ALTN, FM-SR086TB and RG405 Cable, part number FMCN1887, from Fairview Microwave is in-stock and ships same day. This QMA male connector operates up to a maximum frequency of 18 GHz. The QMA male connector also has low passive intermodulation (PIM) of -130 dBc.

Fairview's QMA male connector FMCN1887 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 | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 18 | GHz |
| Return Loss | | 23 | 32 | dB |
| Passive Intermodulation | | -130 | | dBc |
| Operating Voltage (AC) | | | 250 | Vrms |
| Test Voltage (AC) | | | 1,000 | Vrms |
| Inner Conductor DC Resistance | | | 3 | mOhms |
| Outer Conductor DC Resistance | | | 2.5 | mOhms |
| Insulation Resistance | 5,000 | | | MOhms |
| RF Leakage | 70 | | | dB |
| Impedance | | 50 | | Ohms |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|------------------|---------|--------|----|----|----|-------|
| Frequency Range | DC to 3 | 3 to 6 | | | | GHz |
| Return Loss, Max | 32 | 23 | | | | dB |

Electrical Specification Notes:

Insertion Loss = 0.05 * SQRT f(GHz)

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Mechanical Specifications

Size

| | |
|-----------------------|---------------------|
| Length | 0.67 in [17.02 mm] |
| Width | 0.413 in [10.49 mm] |
| Height | 0.413 in [10.49 mm] |
| Weight | 0.013 lbs [5.9 g] |
| Mating Cycles | 100 Cycles |
| Cable Retention Force | 13.48 lbs [6.11 kg] |
| Engagement Force | 5.62lbs [2.55kg] |
| Disengagement Force | 4.49lbs [2.04kg] |

Material Specifications

| Description | Material | Plating |
|-----------------|------------------|-----------|
| Contact | Beryllium Copper | Gold |
| Insulation | PTFE | |
| Outer Conductor | Bronze | Tri-Metal |
| Body | Brass | Gold |
| Coupling Nut | Brass | Nickel |

Environmental Specifications

Temperature

| | |
|-----------------|--------------------------------|
| Operating Range | -40 to +85 deg C |
| Storage Range | -40 to +85 deg C |
| Vibration | IEC 60068-2-64 random |
| Thermal Shock | IEC 60169-1 16.4 (-40 / +85°C) |
| Salt Spray | IEC 60169-1 16.7 (48 hrs) |

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

Plotted and Other Data

Notes:

QMA Male Connector Solder Attachment for FM-SR086ALTN, FM-SR086TB, 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.

For additional information on this product, please click the following link: [QMA Male Connector Solder Attachment for FM-SR086ALTN, FM-SR086TB, RG405 FMCN1887](#)

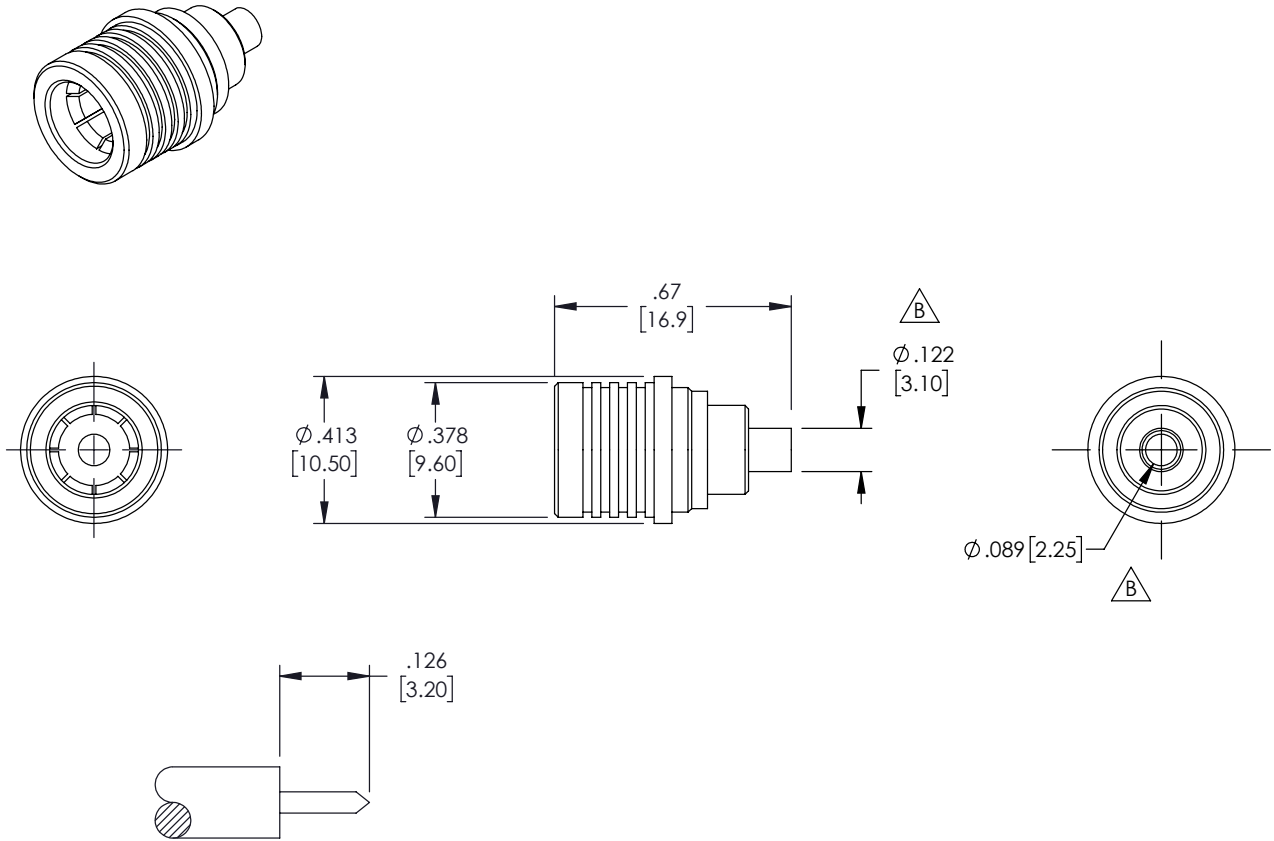
URL: <https://www.fairviewmicrowave.com/qma-male-fm-sr086altn-fm-sr086tb-rg405-connector-fmcn1887-p.aspx>

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FMCN1887 CAD Drawing

QMA Male Connector Solder Attachment for FM-SR086ALTN, FM-SR086TB, RG405

| REVISIONS | | | |
|-----------|------------------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| B | PCR-REVISED DIMENSIONS | 03/24/2022 | AGANWANI |



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURE

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR.
2. SLIDE CABLE INTO CONNECTOR, ENSURING CENTER CONDUCTOR MATES WITH CENTER PIN.
3. OUTER CONDUCTOR BOTTOMS OUT WITH BODY SHOULDER. SOLDER OUTER CONDUCTOR TO CONNECTOR BODY.

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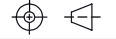
TITLE

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 |

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE

N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

| | | | | |
|------|-----------|-----------|----------|-----|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
| A | 3FKR5 | AKRESOWSK | FMCN1887 | B |

T-Rev.D