

## Engineering Grade 1.85mm Female (Jack) to 2.4mm Female (Jack) Adapter with Stainless Steel Body

1.85mm female to 2.4mm female adapter part number FMAD1617 from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to 2.4mm adapter has a female to female gender configuration and is built of durable stainless steel in an engineering grade design. FMAD1617 1.85mm female to 2.4mm female adapter operates to 50 GHz. The Fairview Microwave RF adapter provides good VSWR of 1.3:1 maximum. The 1.85mm connector mates mechanically with commercially available 2.4mm connectors.

RF adapters can be used to enable connections between two connector types that would otherwise not mate. Certain RF adapter configurations can also be used to protect connectors on expensive equipment where the number of connect and disconnect cycles is high. An RF, microwave, or millimeter wave adapter is connected to the equipment and the commonly changed connection is made with the adapter which can be easily replaced when it wears out after high usage; such adapters are referred to as connector savers. Fairview Microwave also offers bulkhead, panel mount, hermetically sealed, reverse polarity, and isolated ground adapter varieties to serve all of your RF, microwave and millimeter wave needs.

### Electrical Specifications

| Description            | Min   | Typ | Max   | Units |
|------------------------|-------|-----|-------|-------|
| Frequency Range        | DC    |     | 50    | GHz   |
| VSWR                   |       |     | 1.3:1 |       |
| Operating Voltage (AC) |       |     | 150   | Vrms  |
| DWV (AC)               |       |     | 500   | Vrms  |
| Insulation Resistance  | 5,000 |     |       | MOhms |
| RF Leakage             |       |     | 100   | dB    |

### Specifications by Frequency

| Description         | F1        | F2       | F3      | F4       | F5       | Units |
|---------------------|-----------|----------|---------|----------|----------|-------|
| Frequency Range     | DC to 2.5 | 2.5 to 5 | 5 to 10 | 10 to 20 | 20 to 50 | GHz   |
| Insertion Loss, Max | 0.095     | 0.134    | 0.19    | 0.268    | 0.424    | dB    |

### Mechanical Specifications

|             |                    |
|-------------|--------------------|
| <b>Size</b> |                    |
| Length      | 0.88 in [22.30 mm] |
| Width       | 0.31 in [7.90 mm]  |
| Height      | 0.31 in [7.90 mm]  |
| Weight      | 0.02 lbs [9.07 g]  |

| Description                          | Connector 1                              | Connector 2                              |
|--------------------------------------|--|--|
| Type                                 | 1.85mm Female                            | 2.4mm Female                             |
| Polarity                             | Standard                                 | Standard                                 |
| Mating Cycles, Min                   | 500                                      | 500                                      |
| Mating Torque                        | 7.08 to 9.74 in-lbs<br>[0.80 to 1.10 Nm] | 7.08 to 9.74 in-lbs<br>[0.80 to 1.10 Nm] |
| Contact Captivation Axial Force, Min | 4.5 lbs [2.04 kg]                        | 4.5 lbs [2.04 kg]                        |
| Coupling Proof Torque                | 15 in-lbs [1.7 Nm]                       | 15 in-lbs [1.7 Nm]                       |



### Configuration:

- 1.85mm Female Connector 1
- 2.4mm Female Connector 2
- 50 Ohm
- Engineering Grade Design
- Straight Body Geometry

### Features:

- VSWR of 1.3:1 max up to 50 GHz
- Gold Over Nickel Plated Beryllium Copper Contact

### Applications:

- Enables Between Series Connections
- General Purpose Test

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**Material Specifications**

| Description           | Connector 1      | Connector 2      |
|-----------------------|------------------|------------------|
| Type                  | 1.85mm Female    | 2.4mm Female     |
| Contact Material      | Beryllium Copper | Beryllium Copper |
| Contact Plating       | Gold Over Nickel | Gold Over Nickel |
| Insulation Material   | PPO              | PPO              |
| Body Material         | Stainless Steel  | Stainless Steel  |
| Body Plating          | Passivated       | Passivated       |
| Coupling Nut Material | Stainless Steel  | Stainless Steel  |
| Coupling Nut Plating  | Passivated       | Passivated       |

**Environmental Specifications**
**Temperature**

Operating Range

Humidity

Thermal Shock

Salt Spray

-65 to +165 deg C

MIL-STD-202, Method 206

MIL-STD-202, Method 107, Condition B

MIL-STD-202, Method 101, Condition B

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

**Plotted and Other Data**

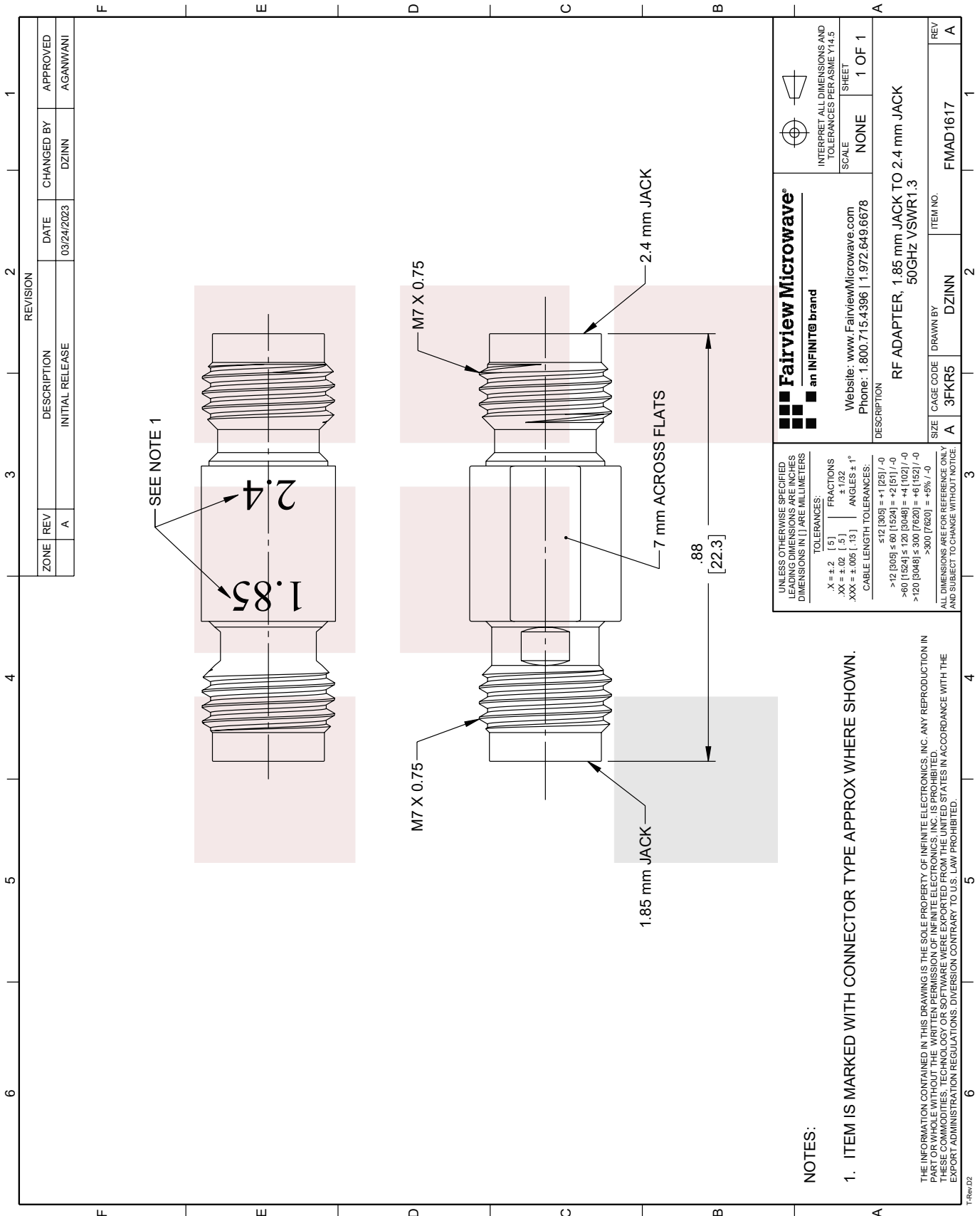
Notes:

Engineering Grade 1.85mm Female (Jack) to 2.4mm Female (Jack) Adapter with Stainless Steel Body 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: [Engineering Grade 1.85mm Female \(Jack\) to 2.4mm Female \(Jack\) Adapter with Stainless Steel Body FMAD1617](#)

URL: <https://www.fairviewmicrowave.com/engineering-grade-1.85mm-female-to-2.4mm-female-adapter-mil-std-202-method-206-with-stainless-steel-body-fmad1617-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



| ZONE |  | REVISION |  | DESCRIPTION     |  | DATE       |       | CHANGED BY |          | APPROVED |  |
|------|--|----------|--|-----------------|--|------------|-------|------------|----------|----------|--|
| A    |  |          |  | INITIAL RELEASE |  | 03/24/2023 | DZINN |            | AGANWANI |          |  |

|  |           |   |          |
|--|-----------|---|----------|
| <p><b>Fairview Microwave®</b><br/>an INFINITE® brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a><br/>Phone: 1.800.715.4396   1.972.649.6678</p> |           | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p> |          |
| <p>DESCRIPTION: RF ADAPTER, 1.85 mm JACK TO 2.4 mm JACK<br/>50GHz VSWR1.3</p>  |           |   |          |
| SIZE   | CAGE CODE | DRAWN BY  | ITEM NO. |
| A  | 3FKR5     | DZINN   | FMAD1617 |
| REV  |           |   | A        |

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

TOLERANCES:  
 .X = ±.2 [ .5] FRACTIONS  
 .XX = ±.02 [ .5] ±.1/32 ANGLES ± 1°  
 .XXX = ±.005 [ .13]

CABLE LENGTH TOLERANCES:  
 ≤12 [305] = +1 [25] / -0  
 >12 [305] ≤ 60 [1524] = +2 [51] / -0  
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0  
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTES:  
 1. ITEM IS MARKED WITH CONNECTOR TYPE APPROX WHERE SHOWN.

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