

## FMAD1612 DATA SHEET

# Engineering Grade 3.5mm Male (Plug) to 3.5mm Female (Jack) Adapter with Stainless Steel Body

3.5mm male to 3.5mm female adapter part number FMAD1612 from Fairview Microwave is in-stock and ships same day. This Fairview 3.5mm to 3.5mm adapter has a male to female gender configuration and is built of durable stainless steel in a engineering grade design. FMAD1612 3.5mm male to 3.5mm female adapter operates to 26.5 GHz. The 3.5mm connector mates mechanically with commercially available SMA and 2.92mm (K) connectors. Our 3.5mm to 3.5mm RF adapter can also be used as a connector saver to extend equipment life.

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   | Тур    | Max   | Units |
|-----------------------|-------|--------|-------|-------|
| Frequency Range       | DC    |        | 26.5  | GHz   |
| VSWR                  |       | 1.25:1 |       |       |
| DWV (AC)              |       |        | 1,000 | Vrms  |
| Insulation Resistance | 5,000 |        |       | MOhms |
|                       |       |        |       |       |

#### Specifications by Frequency

| Description         | F1      | F2     | F3     | F4      | F5         | Units |
|---------------------|---------|--------|--------|---------|------------|-------|
| Frequency Range     | DC to 1 | 1 to 4 | 4 to 8 | 8 to 12 | 12 to 26.5 | GHz   |
| Insertion Loss, Max | 0.05    | 0.1    | 0.141  | 0.173   | 0.257      | dB    |

Electrical Specification Notes:

Values at sea level

## **Mechanical Specifications**

#### Size

 Length
 0.92 in [23.30 mm]

 Width
 0.31 in [7.90 mm]

 Height
 0.31 in [7.90 mm]

 Weight
 0.01 lbs [3.63 g]

| Description                          | Connector 1         | Connector 2         |
|--------------------------------------|---------------------|---------------------|
| Туре                                 | 3.5mm Male          | 3.5mm Female        |
| Polarity                             | Standard            | Standard            |
| Mating Cycles, Min                   | 500                 |                     |
| Mating Torque                        | 7.1 to 9.7 in-lbs   | 7.1 to 9.7 in-lbs   |
|                                      | [0.80 to 1.10 Nm]   | [0.80 to 1.10 Nm]   |
| Contact Retention Force, Min         | 60.7 lbs [27.53 kg] | 60.7 lbs [27.53 kg] |
| Contact Captivation Axial Force, Min | 6.1 lbs [2.77 kg]   | 6.1 lbs [2.77 kg]   |
|                                      |                     |                     |



## **Configuration:**

- 3.5mm Male Connector 1
- 3.5mm Female Connector 2
- 50 Ohm
- Engineering Grade Design
- Straight Body Geometry

## **Features:**

- Gold Plated Beryllium Copper Contact
- Max VSWR of 1.25:1 up to 26.5 GHz

## **Applications:**

- Connector Saver
- General Purpose Test

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Coupling Proof Torque 15 in-lbs [1.7 Nm] 15 in-lbs [1.7 Nm]

## **Material Specifications**

| Description            | Connector 1            | Connector 2                     |
|------------------------|------------------------|---------------------------------|
| Туре                   | 3.5mm Male             | 3.5mm Female                    |
| Contact Material       | Beryllium Copper       | Beryllium Copper                |
| Contact Plating        | Gold                   | Gold                            |
| Insulation Material    | PPO                    | PPO                             |
| Outer Contact Material |                        | Beryllium Copper                |
| Outer Contact Plating  |                        | Gold                            |
| Body Material          | Stainless Steel        | Stainless Steel                 |
| Body Plating           | Passivated Stainless S | teel Passivated Stainless Steel |
| Coupling Nut Material  | Beryllium Copper       |                                 |
| Coupling Nut Plating   | Gold                   |                                 |
|                        |                        |                                 |

## **Environmental Specifications**

**Temperature** 

Operating Range Humidity Thermal Shock Salt Spray -55 to +105 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 3.5mm Male (Plug) to 3.5mm 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 3.5mm Male (Plug) to 3.5mm Female (Jack) Adapter with Stainless Steel Body FMAD1612

URL: https://www.fairviewmicrowave.com/3-5mm-male-to-3-5mm-female-adapter-mil-std-202-method-206-stainless-steel-engineering-grade-fmad1612-p.aspx

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