

## 9 dB Fixed Attenuator 2.4mm Male to 2.4mm Female Up to 50 GHz Rated to 1 Watt with Passivated Stainless Steel Body

Fairview Microwave carries a broad selection of fixed attenuators with a wide range of attenuation levels, frequency ranges, and power dissipation ranges. Also known as RF pads, RF microwave attenuators lower the amplitude of a signal (or attenuate) a known amount. These attenuator pads can be used in a wide variety of applications including reducing a signal level to protect measurement equipment or other circuitry, extending the range of power meters and amplifiers, and impedance matching circuits by reducing the VSWR seen by adjacent components. RF attenuators can prevent signal overload in amplifiers, receivers and detectors, adjusting the signal level to a range that is optimal.

Few RF components are as commonly used as fixed coaxial attenuators, and Fairview Microwave carries one of the largest in-stock varieties and ships them same day. The SA5074-09 is a 9 dB Fixed Attenuator that operates from DC to 50 GHz and is rated to 1 Watt. The versatile coaxial package uses 2.4mm male to 2.4mm female connectors and is also REACH and RoHS compliant.

### Electrical Specifications

| Description   | Min | Typ | Max    | Units |
|---|-----|-----|--------|-------|
| Frequency Range                                       | DC  |     | 50     | GHz   |
| Impedance   |     | 50  |        | Ohms  |
| Nominal Attenuation                                   |     | 9   |        | dB    |
| VSWR  |     |     | 1.75:1 |       |
| Input Power, CW<br>derated linearly to 0.1W at +100°C |     |     | 1      | Watt  |

### Specifications by Frequency

| Description         | F1         | F2         | F3       | F4 | F5 | Units |
|---------------------|------------|------------|----------|----|----|-------|
| Range               | DC to 26.5 | 26.5 to 40 | 40 to 50 |    |    | GHz   |
| VSWR, Max           | 1.35:1     | 1.6:1      | 1.75:1   |    |    |       |
| Atten Accuracy, Max | ±0.5       | ±1         | ±1.5     |    |    | dB    |

### Mechanical Specifications

#### Size

|                           |                            |
|---------------------------|----------------------------|
| Length                    | 0.87 in [22.1 mm]          |
| Width/Diameter            | 0.312 in [7.92 mm]         |
| Weight                    | 0.012 lbs [5.44 g]         |
| Body Material and Plating | Passivated Stainless Steel |

#### Configuration

|               |                      |
|---------------|----------------------|
| Design        | Fixed                |
| Package Style | Connectorized Module |



### Features:

- DC to 50 GHz Frequency Range
- Attenuation 9dB Typica
- Max Power 1 Watt (CW)
- VSWR < 1.75:1

### Applications:

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production systems

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 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)

### Connectors

| Description                | Connector 1                | Connector 2                |
|----------------------------|----------------------------|----------------------------|
| Type                       | 2.4mm Male                 | 2.4mm Female               |
| Contact Material & Plating | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Contact Plating Spec.      | MIL-PRF-39012              | MIL-PRF-39012              |
| Body Material & Plating    | Passivated Stainless Steel | Passivated Stainless Steel |

#### Mechanical Specification Notes:

The connectors use high temperature plastic bead dielectric.

### Environmental Specifications

#### Temperature

Operating Range -55 to +100 deg C

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

### Plotted and Other Data

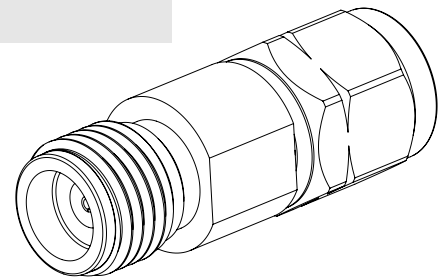
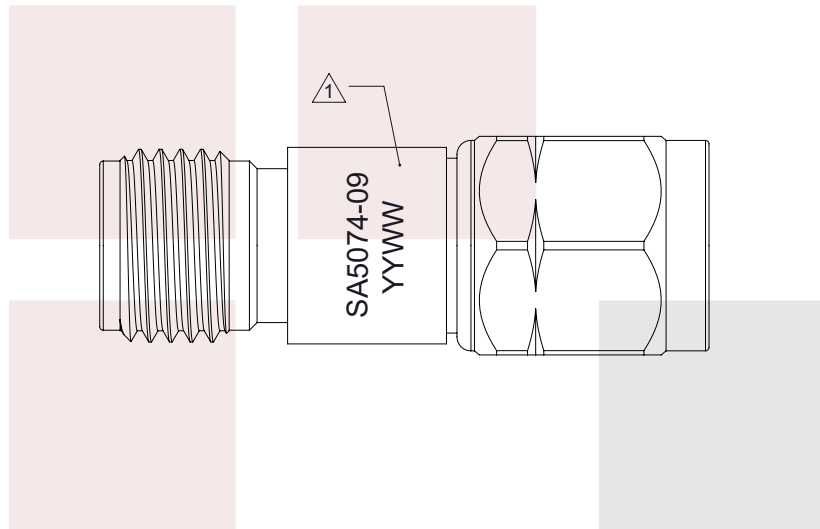
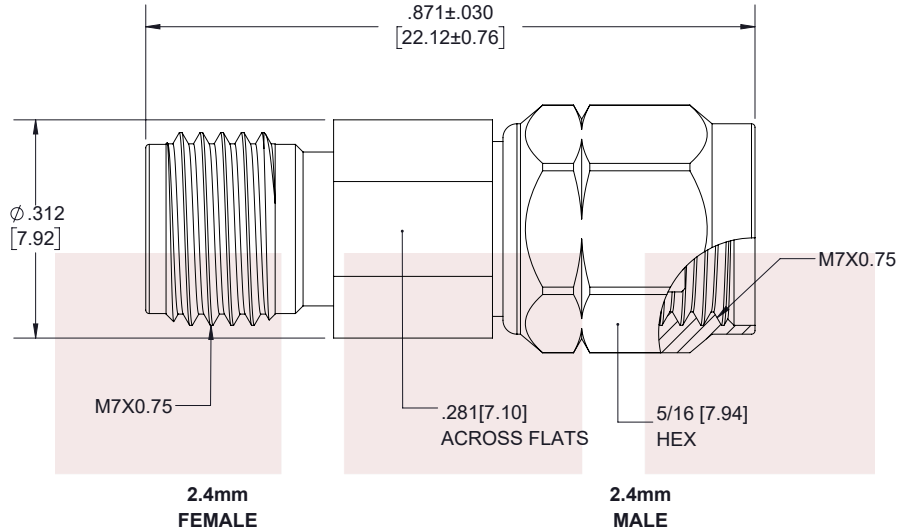
Notes:

9 dB Fixed Attenuator 2.4mm Male to 2.4mm Female Up to 50 GHz Rated to 1 Watt with Passivated 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 Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [9 dB Fixed Attenuator 2.4mm Male to 2.4mm Female Up to 50 GHz Rated to 1 Watt with Passivated Stainless Steel Body SA5074-09](#)

URL: <https://www.fairviewmicrowave.com/9db-fixed-attenuator-2.4mm-male-2.4mm-female-1-watt-sa5074-09-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.



### STANDARD TOLERANCES

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

### NOTES:

1. MARKING TO BE AS LARGE AS POSSIBLE, CLEAR AND READABLE. YYWW EQUALS DATE CODE.



### NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

TITLE  
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Up to 50 GHz Rated to 1 Watt with Passivated  
Stainless Steel Body

|          |           |           |        |       |     |      |   |      |
|----------|-----------|-----------|--------|-------|-----|------|---|------|
| DWG NO   | SA5074-09 | CAGE CODE | 3FKR5  |       |     |      |   |      |
| CAD FILE | 01/15/19  | SHEET     | 1 OF 1 | SCALE | N/A | SIZE | A | 7361 |