

0 dB Fixed Attenuator 2.92mm Male To 2.92mm Female Up To 40 GHz Rated To 0.5 Watts 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 selections and ships them same day. The SA4012-00 is a 0 dB Fixed Attenuator that operates from DC to 40 GHz and is rated to 0.5 Watt. The versatile coaxial package uses 2.92mm male to 2.92mm female connectors and is also REACH and RoHS compliant.

Electrical Specifications

| Description | Min | Тур | Max | Units | |
|--------------------------|--------------|-----|-------|-------|--|
| Frequency Range | DC | | 40 | GHz | |
| Impedance | | 50 | | Ohms | |
| Nominal Attenuation | | 0 | | dB | |
| VSWR | | | 1.5:1 | | |
| Input Power, CW | | | 0.5 | Watts | |
| derated linearly to 0.05 | 5W at +125°C | | | | |

Features:

- DC to 40 GHz Frequency Range
- Attenuation 0 dB
- Deviation 0.8 dB
- Max Power 0.5 Watt (CW)
- VSWR < 1.5:1

Applications:

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

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-------------|----------|------------|------------|----|----|-------|
| Range | DC to 18 | 18 to 26.5 | 26.5 to 40 | | | GHz |
| VSWR, Max | 1.3:1 | 1.5:1 | 1.5:1 | | | |

Electrical Specification Notes:

Typical deviation from nominal attenuation: 0.5 dB (0 to 26.5 GHz), 0.8 dB (26.5 to 40 GHz)

Mechanical Specifications

Size Length Width/Diameter Weight Body Material and Plating

Configuration

Design Package Style 0.87 in [22.1 mm] 0.315 in [8 mm] 0.053 lbs [24.04 g] Passivated Stainless Steel

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

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SA4012-00 DATA SHEET





Connectors

| Description | Connector 1 | Connector 2 | | | |
|----------------------------|----------------------------|----------------------------|--|--|--|
| Туре | 2.92mm Male | 2.92mm Female | | | |
| Contact Material & Plating | Beryllium Copper, Gold | Beryllium Copper, Gold | | | |
| Contact Plating Spec. | MIL-PRF-39012 | MIL-PRF-39012 | | | |
| Hex Size | 5/16 inch | | | | |
| 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 +125 deg C

Compliance Certifications (visit www.FairviewMicrowave.com for current document)

| RoHS Compliant | Yes | |
|-----------------|------------|--|
| REACH Compliant | 12/17/2015 | |

Plotted and Other Data

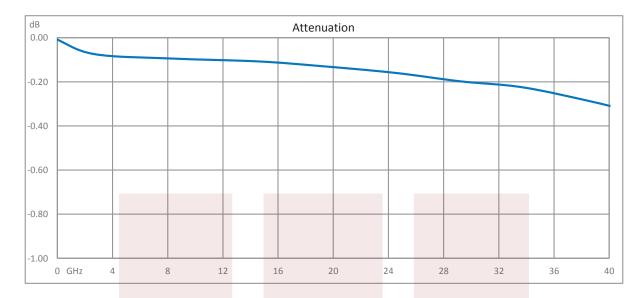
Notes:

Typical Performance Data









0 dB Fixed Attenuator 2.92mm Male To 2.92mm Female Up To 40 GHz Rated To 0.5 Watts 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: 0 dB Fixed Attenuator 2.92mm Male To 2.92mm Female Up To 40 GHz Rated To 0.5 Watts With Passivated Stainless Steel Body SA4012-00

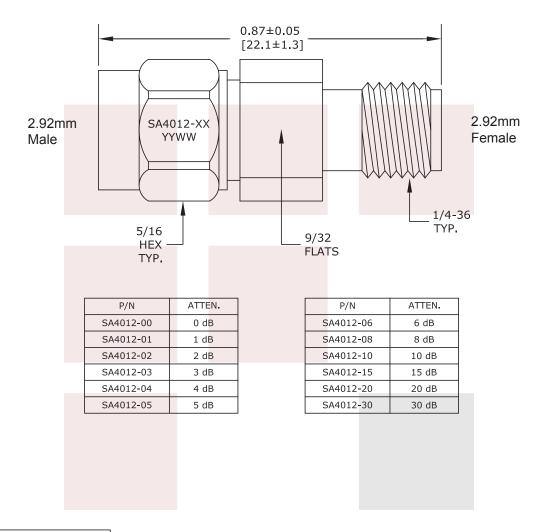
URL: https://www.fairviewmicrowave.com/0db-fixed-attenuator-2.92mm-male-2.92mm-female-0.5-watts-sa4012-00-p.

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| <u>STANDA</u> | RD TOLERANCES |
|---------------|----------------------------|
| .x | ±0.03 |
| .XX .XXX | ± 0.010 ± 0.005 |
| ***** | |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

| FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM | 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]. | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-----------------|--------|------|
| 0 dB Fixed Attenuator 2.92mm Male To 2.92mm Female Up To 40 GHz Rated To 0.5 Watts With Passivated Stainless Steel Body | DWG NO SA4012 | | | CAGE CODE 3FKR5 | | |
| | CAD FILE 031716 | SHEET | SCALI | E N/A | SIZE A | 3045 |

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