

1 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR



SA4016-01

Features

- DC to 40 GHz Frequency Range
- Attenuation 1±1 dB
- Max Power 2 Watts (CW)
- VSWR < 1.4:1

Applications

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

Description

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 SA4016-01 is a 1 dB Fixed Attenuator that operates from DC to 40 GHz and is rated to 2 Watts. The versatile coaxial package uses 2.92mm male to 2.92mm female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Nominal Attenuation		1		dB
VSWR			1.4:1	
Input Power, CW			2	Watts
derated linearly to 0.2W at +125°C				
Input Power, Peak			50	Watts
5 µs pulse, .05% duty cycle				

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 18	18 to 26.5	26.5 to 40			GHz
VSWR, Max	1.3:1	1.4:1	1.4:1			
Attenuation Accuracy, Typ	0.5	0.5	0.8			dB

Mechanical Specifications

Size

Length	0.87 in [22.1 mm]
Width/Diameter	0.312 in [7.92 mm]
Height	0 in [0 mm]
Weight	0.016 lbs [7.26 g]

1 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR



SA4016-01

Body Material and Plating	Passivated Stainless Steel
Configuration	
Design	Fixed
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	2.92mm Male	2.92mm Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-PRF-39012	MIL-PRF-39012
Hex Size	5/16 inch	
Body Material and 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 (see [product page](#) for current document)

Plotted and Other Data

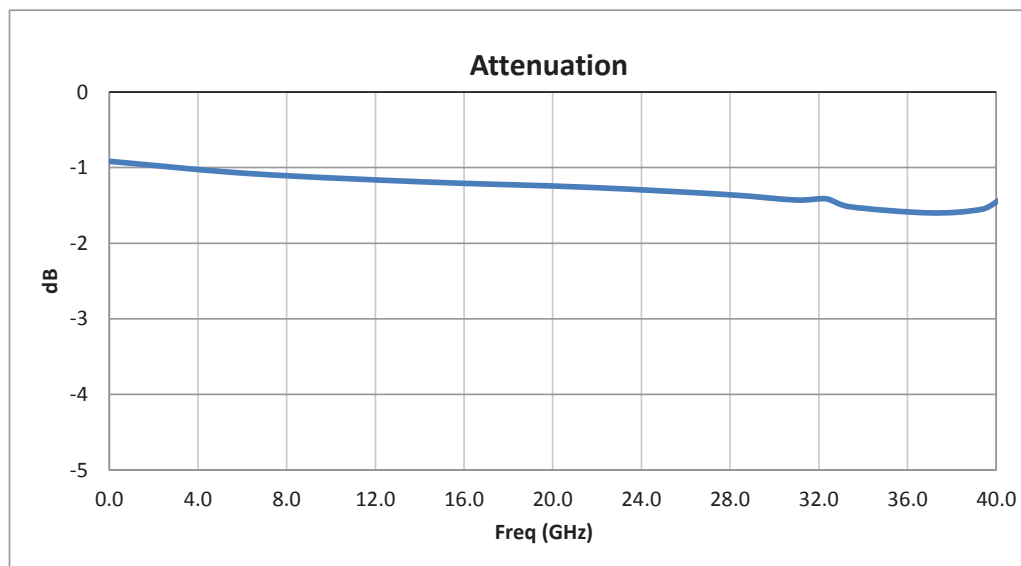
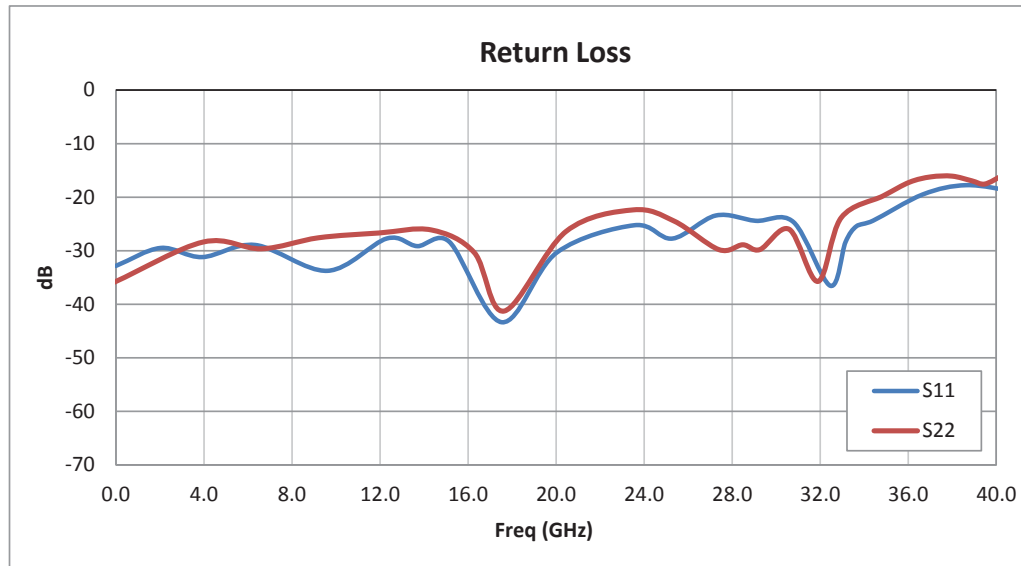
Notes:

1 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR



SA4016-01

Typical Performance Data



1 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR



SA4016-01

1 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR 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: [1 dB Fixed Attenuator 2.92mm Male \(Plug\) to 2.92mm Female \(Jack\) Up to 40 GHz Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR SA4016-01](#)

URL: <https://www.fairviewmicrowave.com/1db-fixed-attenuator-2.92mm-male-2.92mm-female-2-watts-sa4016-01-p.aspx>

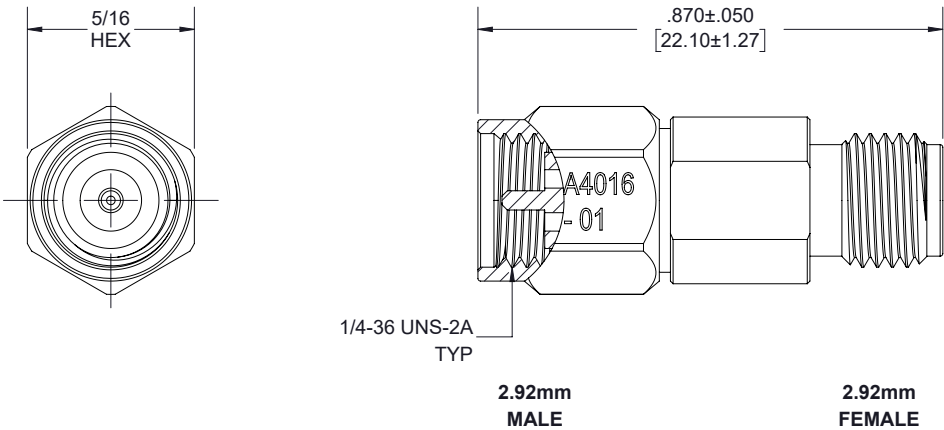
The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right 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 liability arising out of the use of any part or document.

SA4016-01 CAD Drawing

1 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz

Rated to 2 Watts, Passivated Stainless Steel Body, 1.4 VSWR

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR SA4016-XX 20191025	10/30/19	S.ELLIS



THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.



Fairview Microwave

an INFINIT® brand

TITLE

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

TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
.X = ±.2 [.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



THE INFORMATION AND
DESIGN IN THIS DOCUMENT
IS THE PROPERTY OF
FAIRVIEW MICROWAVE CORPORATION.
ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE	CAGE CODE	DRAWN BY	PART NUMBER	REV
A	3FKR5	K.DANG	SA4016-01	A

T-Rev.C