# C brand

6 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 5 Watts, Heatsink Body, 1.45 VSWR

## SA4017-06

#### Features

- Bidirectional
- DC to 40 GHz Frequency Range
- Attenuation 6±1.5 dB

#### Applications

- Instrumentation
- Precision measurements

#### 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 SA4017-06 is a 6 dB Fixed Attenuator that operates from DC to 40 GHz and is rated to 5 Watts. The versatile coaxial package uses 2.92mm male to 2.92mm female connectors. The Black Anodized Aluminum Heatsink body allows for efficient heat dissipation under high power usage conditions.

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
Impedance		50		Ohms
Nominal Attenuation		6		dB
VSWR			1.45:1	
Input Power, CW			5	Watts
rated at +25°C, derated linearly to 0W	at +125°C			
Input Power, Peak			200	Watts
5µs pulse, 1.25% duty cycle				

#### **Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 26.5	26.5 to 40				GHz
VSWR, Max	1.25:1	1.45:1				
Attenuation Accuracy, Typ	1	1.5				dB

Electrical Specification Notes:

Values at +25°C, sea level.

- -TIGHAR
- Max Power 5 Watts (CW)
- VSWR < 1.45:1
- Prototyping and characterization
- Production systems



# The Right Parts, Right Away

6 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 5 Watts, Heatsink Body, 1.45 VSWR

### SA4017-06

#### **Mechanical Specifications**

Size Length Width/Diameter Height Weight Body Material and Plating

0 in [0 mm] 0 in [0 mm] 0 in [0 mm] 0.082 lbs [37.19 g] Black Anodized Aluminum Heatsink

Configuration

Design Package Style

#### Connectors

Description	Connector 1	Connector 2
Туре	2.92mm Male	2.92mm Female
Connector Specification	MIL-STD-348A	MIL-STD-348A
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

#### **Environmental Specifications**

Temperature Operating Range

-55 to +125 deg C

Fixed. Bidirectional

**Connectorized Module** 

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:





# The Right Parts, Right Away

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SA4017-06 S11

## SA4017-06

#### Typical Performance Data

n

-10

-20

-30

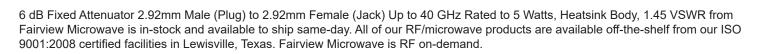
-40

-50

0 2

6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

S11 dB



— ·Spec VSWR dB

-SA4017-06 S21

For additional information on this product, please click the following link: 6 dB Fixed Attenuator 2.92mm Male (Plug) to 2.92mm Female (Jack) Up to 40 GHz Rated to 5 Watts, Heatsink Body, 1.45 VSWR SA4017-06

# URL: https://www.fairviewmicrowave.com/6db-fixed-attenuator-2.92mm-male-2.92mm-female-5-watts-sa4017-06-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 impliment 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.



-10

-12 S21 dB

-14

-16 -18

-20 -22

-24

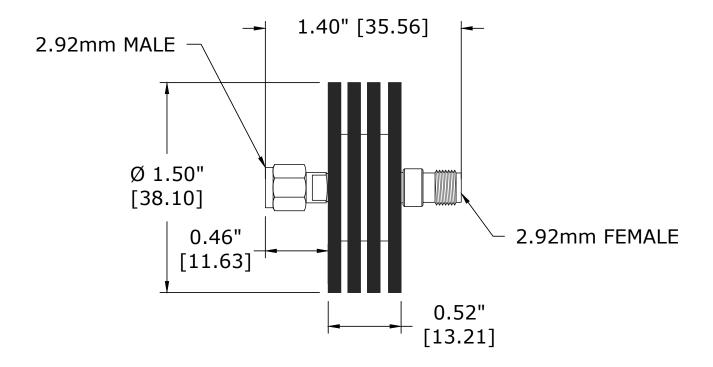
40

<sup>38</sup>GHz



### SA4017-06 CAD Drawing

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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].					
TITLE	DWG NO SA4017-06			CAGE CODE 3FKR5		
	CAD FILE 011415	SHEET	SCAL	E N/A	SIZE A	5568