



# SA5074-03

### **Features**

- DC to 50 GHz Frequency Range
- · Attenuation 3dB Typical

## **Applications**

- Instrumentation
- · Precision measurements

- Max Power 1 Watt (CW)
- VSWR < 1.75:1</li>
- · 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 SA5074-03 is a 3 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.

## **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		50	GHz
Impedance		50		Ohms
Nominal Attenuation		3		dB
VSWR			1.75:1	
Input Power, CW			1	Watt
derated linearly to 0.1W at +100°C				

## **Specifications by Frequency**

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

# **Mechanical Specifications**

Size

Length Width/Diameter Height Weight

Body Material and Plating

0.87 in [22.1 mm] 0.312 in [7.92 mm] 0 in [0 mm] 0.017 lbs [7.71 g]

Passivated Stainless Steel







# SA5074-03

Configuration

Design

Package Style

Fixed

Connectorized Module

#### **Connectors**

Description	Connector 1	Connector 2
Туре	2.4mm Male	2.4mm Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-PRF-39012	MIL-PRF-39012
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 +100 deg C

Compliance Certifications (see product page for current document)

# **Plotted and Other Data**

Notes:

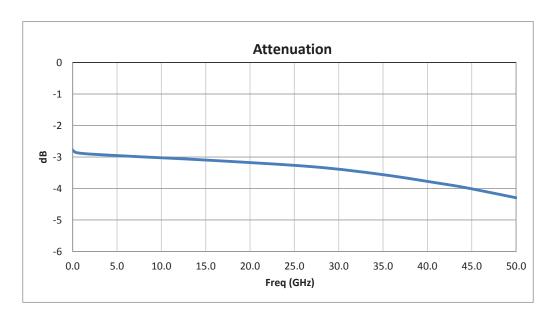




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## **Typical Performance Data**











# SA5074-03

3 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) Up to 50 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.75 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.

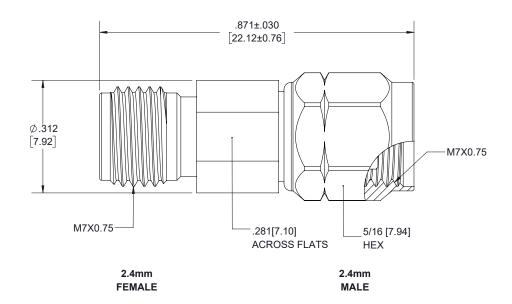
For additional information on this product, please click the following link: 3 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) Up to 50 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.75 VSWR SA5074-03

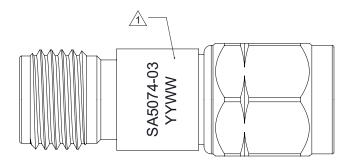
URL: https://www.fairviewmicrowave.com/3db-fixed-attenuator-2.4mm-male-2.4mm-female-1-watt-sa5074-03-p.aspx

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.

# SA5074-03 CAD Drawing

3 dB Fixed Attenuator 2.4mm Male (Plug) to 2.4mm Female (Jack) Up to 50 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.75 VSWR





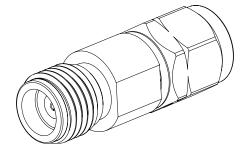
**STANDARD TOLERANCES** ±0.2 .X

.XX ±0.01  $.XXX \pm 0.005$ 

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

## NOTES:

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



Fairview Microwave 1 RF COMPONENTS ON DEMAND. Done!	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 SA5074-03			CAGE CODE 3FKR5		
	CAD FILE 01/15/19	SHEET 1 OF 1	SCAL	E N/A	SIZE A	7361