

3 dB Fixed Attenuator 1.85mm Male To 1.85mm Female Up To 65 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 selections and ships them same day. The SA6510-03 is a 3 dB Fixed Attenuator that operates from DC to 65 GHz and is rated to 1 Watt. The versatile coaxial package uses 1.85mm male to 1.85mm female connectors and is also REACH and RoHS compliant.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		65	GHz
Impedance		50		Ohms
Nominal Attenuation		3		dB
VSWR			1.65:1	
Input Power, CW derated linearly to 0.1W at +100°C			1	Watts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Range	DC to 18	18 to 40	40 to 65			GHz
VSWR, Max	1.35:1	1.55:1	1.65:1			
Atten Accuracy, Typ	±1	±1	±1.5			dB

Mechanical Specifications

Size	
Length	0.88 in [22.35 mm]
Width/Diameter	0.312 in [7.92 mm]
Weight	0.014 lbs [6.35 g]
Body Material and Plating	Passivated Stainless Steel

Configuration

Design	Fixed
Package Style	Connectorized Module



Features:

- DC to 65 GHz Frequency Range
- Attenuation 3±1.5 dB
- Max Power 1 Watt (CW)
- VSWR < 1.65:1

Applications:

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

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Connectors

Description	Connector 1	Connector 2
Type	1.85mm Male	1.85mm Female
Connection Method	Standard	Standard
Polarity	Standard	Standard
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	MIL-PRF-39012	MIL-PRF-39012
Dielectric Type	Teflon	Teflon
Coupling Nut Material & Plating	Passivated Stainless Steel	
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature

Operating Range -55 to +100 deg C

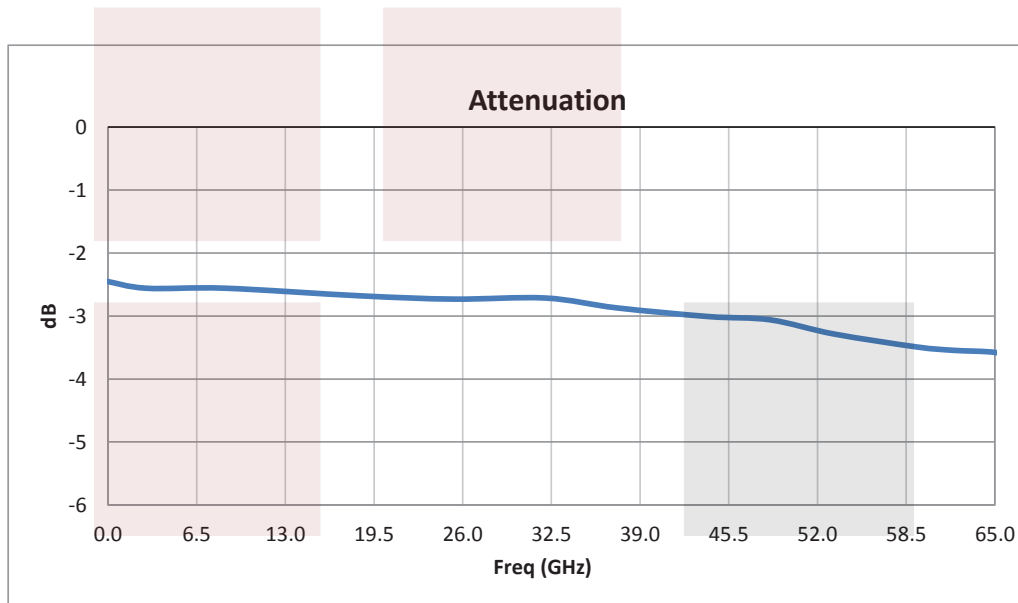
Compliance Certifications (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes
 REACH Compliant 12/17/2015

Plotted and Other Data

Notes:

Typical Performance Data

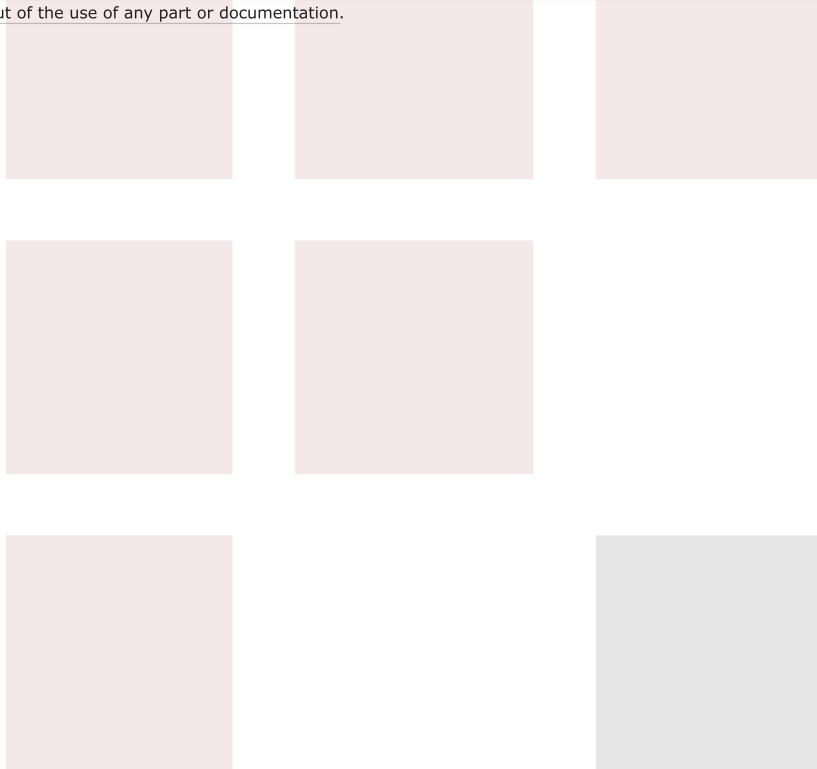


3 dB Fixed Attenuator 1.85mm Male To 1.85mm Female Up To 65 GHz Rated To 1 Watt With Passivated Stainless Steel Body from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

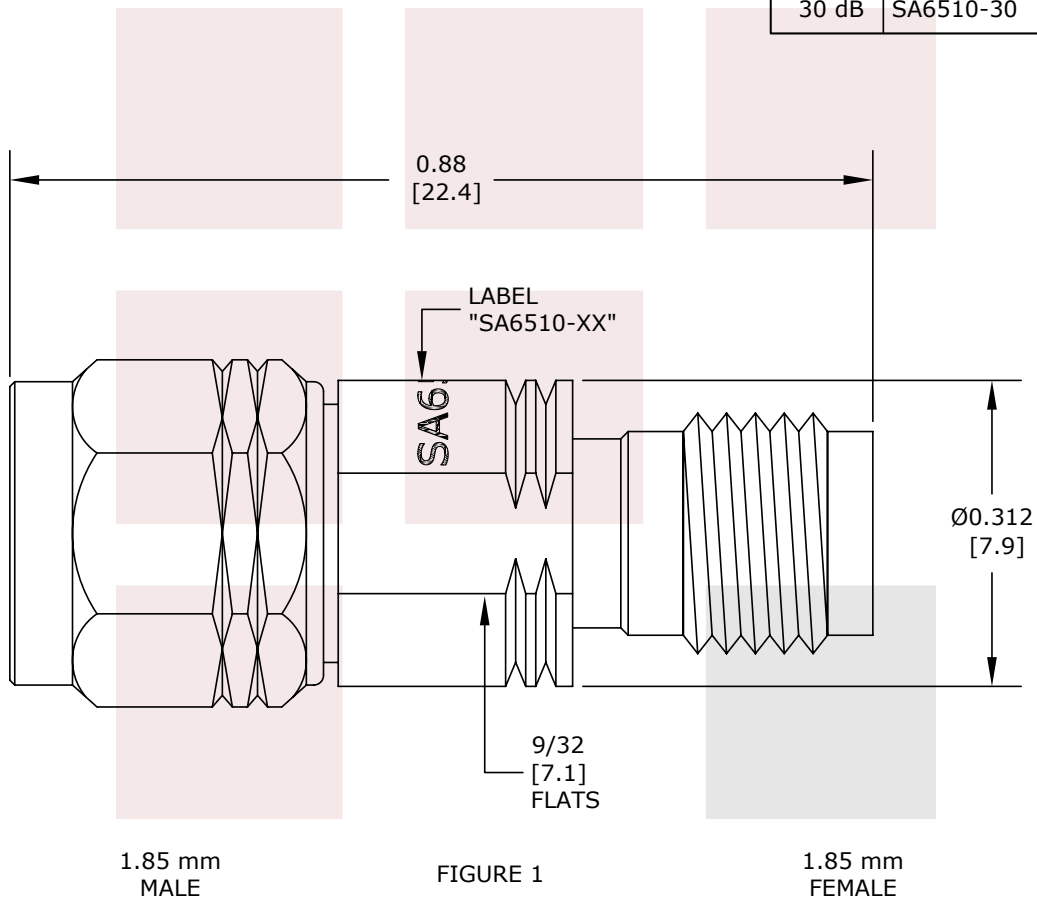
For additional information on this product, please click the following link: [3 dB Fixed Attenuator 1.85mm Male To 1.85mm Female Up To 65 GHz Rated To 1 Watt With Passivated Stainless Steel Body SA6510-03](#)

URL: <http://www.fairviewmicrowave.com/3db-fixed-attenuator-1.85mm-male-1.85mm-female-1-watt-sa6510-03-p.aspx>

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ATTEN.	P/N
3 dB	SA6510-03
6 dB	SA6510-06
10 dB	SA6510-10
20 dB	SA6510-20
30 dB	SA6510-30



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TITLE 3 dB Fixed Attenuator 1.85mm Male To 1.85mm Female Up To 65 GHz Rated To 1 Watt With Passivated Stainless Steel Body		DWG NO SA6510		CAGE CODE 3FKR5	
CAD FILE	060216	SHEET	SCALE	N/A	SIZE A 3045