

20 dB Fixed Attenuator TNC Male (Plug) to TNC Female (Jack) Up to 3 GHz Rated to 1 Watt, Brass Tri-Metal Body, 1.25 VSWR



SA3T-20

Features

- DC to 3 GHz Frequency Range
- Attenuation 20 dB
- Max Power 1 Watt (CW)
- VSWR < 1.25:1

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 SA3T-20 is a 20 dB Fixed Attenuator that operates from DC to 3 GHz and is rated to 1 Watt. The versatile coaxial package uses TNC male to TNC female connectors.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Nominal Attenuation		20		dB
VSWR			1.25:1	
Input Power, CW			1	Watt
Input Power, Peak for 25 μsec.			100	Watts

Electrical Specification Notes:

Power coefficient of 0.001 dB/W (change in attenuation with increase in power)//Temperature coefficient of 0.001 dB/°C max., 0.0003 dB/°C typ.

Mechanical Specifications

Size

Length	2.08 in [52.83 mm]
Width/Diameter	0.63 in [16 mm]
Height	0 in [0 mm]
Weight	0.0835 lbs [37.87 g]
Body Material and Plating	Brass, Tri-Metal

Configuration

Design	Fixed
Package Style	Connectorized Module

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Female
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Contact Plating Specification	10 μ-in.	10 μ-in.
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 μ-in.	100 μ-in.

Environmental Specifications

Temperature	
Operating Range	-50 to +80 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

20 dB Fixed Attenuator TNC Male (Plug) to TNC Female (Jack) Up to 3 GHz Rated to 1 Watt, Brass Tri-Metal Body, 1.25 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: [20 dB Fixed Attenuator TNC Male \(Plug\) to TNC Female \(Jack\) Up to 3 GHz Rated to 1 Watt, Brass Tri-Metal Body, 1.25 VSWR SA3T-20](#)

URL: <https://www.fairviewmicrowave.com/20db-fixed-attenuator-tnc-male-tnc-female-1-watt-sa3t-20-p.aspx>

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