4 dB Fixed Attenuator 1.85mm Male (Plug) to 1.85mm Female (Jack) Up to 65 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.65 VSWR

SA6510-04

Features

- DC to 65 GHz Frequency Range
- Attenuation 4±1.5 dB
- Max Power 1 Watt (CW)
- VSWR < 1.65:1

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 SA6510-04 is a 4 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		65	GHz
Impedance		50		Ohms
Nominal Attenuation		4		dB
VSWR			1.65:1	
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 60	60 to 65		GHz
VSWR, Max	1.35:1	1.55:1	1.65:1	1.65:1		
Attenuation Accuracy, Typ	0.75	1	1.5	1.5		dB

Mechanical Specifications

Size	
Length	0.88 in [22.35 mm]
Width/Diameter	0.312 in [7.92 mm]
Height	0 in [0 mm]
Weight	0.016 lbs [7.26 g]
Body Material and Plating	Passivated Stainless Steel

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4 dB Fixed Attenuator 1.85mm Male (Plug) to 1.85mm Female (Jack) Up to 65 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.65 VSWR

SA6510-04

Configuration

Design	Fixed
Package Style	Connectorized Module

Connectors

Description	Connector 1	Connector 2
Type	1.85mm Male	1.85mm Female
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-PRF-39012	MIL-PRF-39012
Dielectric Type	PTFE	PTFE
Coupling Nut Material and Plating	Passivated Stainless Steel	
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
Storage Range	-55 to +100 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data

4 dB Fixed Attenuator 1.85mm Male (Plug) to 1.85mm Female (Jack) Up to 65 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.65 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: 4 dB Fixed Attenuator 1.85mm Male (Plug) to 1.85mm Female (Jack) Up to 65 GHz Rated to 1 Watt, Passivated Stainless Steel Body, 1.65 VSWR SA6510-04

URL: https://www.fairviewmicrowave.com/4db-fixed-attenuator-1.85mm-male-1.85mm-female-1-watt-sa6510-04-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.

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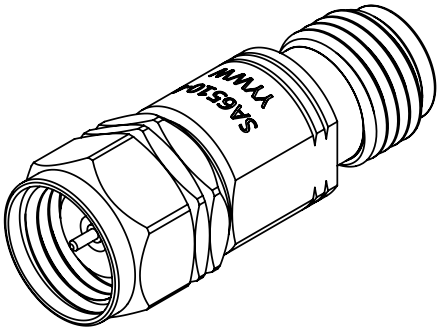
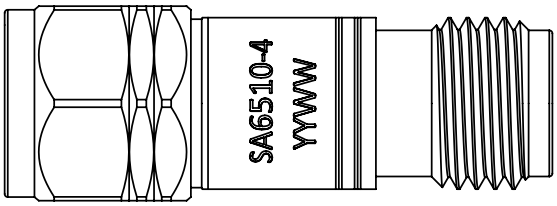
SA6510-04 CAD Drawing

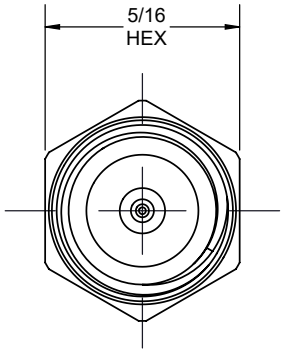
4 dB Fixed Attenuator 1.85mm Male (Plug) to 1.85mm Female (Jack) Up to 65 GHz
Rated to 1 Watt, Passivated Stainless Steel Body, 1.65 VSWR

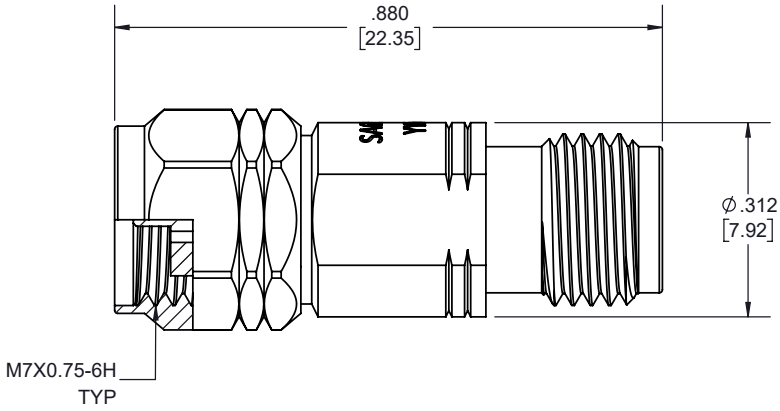
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PE7403-10 SA6510-10 20220429	6/7/2022	S. PONG





1.85mm MALE **1.85mm FEMALE**





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an INFINITE brand

TITLE

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

TOLERANCES:

.X = ± .2 [5.08]
.XX = ± .02 [.51]
.XXX = ± .005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.DANG	SA6510-4	B

T-Rev.D

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