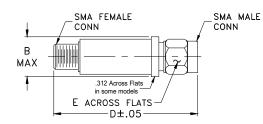
# Coaxial **SMA Fixed Attenuator** DC to 6000 MHz 5dB

### 50Ω **1W**

## **Maximum Ratings**

Operating Temperature	-45°C to 100°C			
Storage Temperature	-55°C to 100°C			
Permanent damage may occur if any of these limits are exceeded.				

## **Outline Drawing**



## Outline Dimensions (inch )

В	D	Е	wt
.410	1.43	.312	grams
10.41	36.32	7.92	10.0

**Electrical Schematic** 

 $R3 \geq$ 

-0

C

FEMALE

 $\sim$ 

R2

 $\leq R1$ 

C

MALE

0

## Features

- wideband coverage, DC to 6000 MHz
- 1 watt rating
- rugged unibody construction
- off-the-shelf availability
- · very low cost

## **Applications**

- impedance matching
- signal level adjustment



Generic photo used for illustration purposes only

CASE STYLE: FF704 Connectors Model SMA VAT-5+

+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

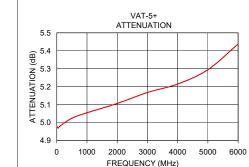
## **Electrical Specifications**

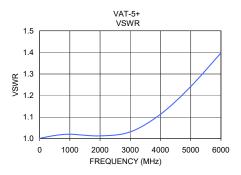
FREQ. RANGE (MHz)	ATTENUATION * (dB) Flatness **				VSWR (:1)			MAX. INPUT POWER	
		DC-3 GHz	3-5 GHz	5-6 GHz	DC-6 GHz	DC-3 GHz	3-5 GHz	5-6 GHz	(W)
f <sub>L</sub> -f <sub>U</sub>	Nom.	Тур.	Тур.	Тур.	Тур.	Тур. Мах.	Тур. Мах.	Тур.	
DC-6000	5±0.3	0.10	0.10	0.10	0.25	1.05 1.20	1.15 1.45	1.40	1.0

\* Attenuation varies by 0.3 dB max. over temperature.

\*\* Flatness= variation over band divided by 2.

#### **Typical Performance Data** Attenuation VSWR Frequency (MHz) (dB) (:1) 0.03 4.98 1.00 50.00 4.97 1.00 100.00 4.98 1.00 500.00 5.03 1.01 1000.00 1.02 5.06 2000.00 1.01 5.11 3000.00 5.17 1.03 4000.00 5.22 1.11 5000.00 5.30 1.24 6000.00 5.44 1.40





A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document. B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement ins C. The parts covered by this specification document are subject to Mini-Circuit's standard limited warrantv and terms and conditions (collectively: "Standard Terms"): Purchasers of this performance Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

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# **Fixed Attenuator**

Typical Performance Data

FREQUENCY (MHz)	ATTENUATION (dB)	RETURN LOSS (dB)
0.03	4.98	68.75
50.00	4.97	57.94
100.00	4.98	52.92
500.00	5.03	42.82
1000.00	5.06	39.88
2000.00	5.11	43.75
3000.00	5.17	36.14
4000.00	5.22	25.39
5000.00	5.30	19.35
6000.00	5.44	15.61



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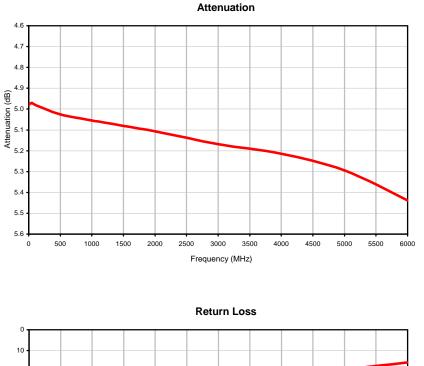
 Office Concurss

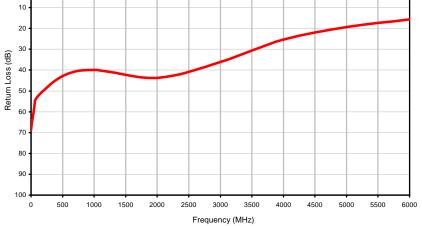
 IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED O RoHS compliant P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
 Page 1 of Minicipality.com

 Image: Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see

# **Fixed Attenuator**

# Typical Performance Curves







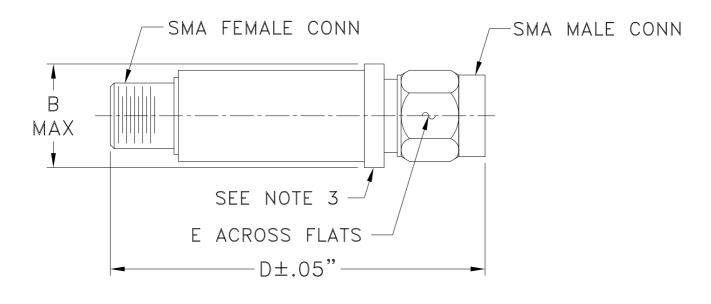
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# Case Style

FF704

FF

# **Outline Dimensions**



CASE #.	А	В	С	D	Е	WT GRAMS
FF704		.410		1.43	.312	10.0
		(10.41)		(36.32)	(7.92)	

Dimensions are in inches (mm). Tolerances: 2Pl. ±.04; 3Pl. ±.030

Notes:

- 1. Case material: Stainless steel.
- 2. Case finish: Gold plated.
- 3. Round Flange may have .312 Across Flats in some models.





P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site The Design Engineers Search Engine Provides ACTUAL Data Instantity From MINI-CIRCUITS At: www.minicircuits.com RF/IF MICROWAVE COMPONENTS

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# Environmental Specifications

ENV28T6

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec	
Operating Temperature	-45° to 100° C Ambient Environment	Individual Model Data Sheet	
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet	
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D	
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103	
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B	
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D	
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I	

ENV28T6 Rev: A 09/26/13 M143494 File: ENV28T6.pdf

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