

# **SFAP Attenuator Series**

### Description

SemiGen RF/microwave fixed attenuator pads feature precise resistor films and superior metallization resulting in superior performance and consistency. Our advanced thin-film technology allows our parts to have full side wraps for SMT installation and a complete grounding backside for ease in attachment, as no ground bonding is required. Wire bondable top side contacts for RF in/out make these ideal for standard RF/microwave assembly techniques.

They are available as commercial or screened to MIL-PRF-38534 Class H&K. Custom values are easy to fabricate and design allowing users to design in a specific value of choice.

#### Features

- Oxide-nitride passivated
- Power Handling to 2W CW
- Flat Response from DC to 20 GHz
- Return Loss >18 dB DC to 14 GHz
- Return Loss >16 dB 15 GHz to 20 GHz
- Temp Stable TCR <100 PPM</li>
- Available up screened MIL-PRF-38534 Class H&K

#### **Applications**

These attenuator pads are the perfect solution for a wide range of applications including microwave radio, military subsystems, fiber optics, scientific instruments and sensor applications up to 20 GHz.

### Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum	
Rated Voltage	50VDC	
Operating Temperature	-55°C to +150°C	
Storage Temperature	-65°C to +200°C	
Moisture Sensitivity Rating	MSL 1	

1. Exceeding any one or combination of these limits may cause permanent damage to this device.

 SemiGen does not recommend sustained operation near these survivability limits.

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**Static Sensitivity** 

**Moisture Sensitivity** 

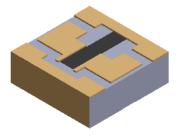
SemiGen attenuators are MSL 1.

electronic devices are sensitive

electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

These

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### **Available Parts**

Part Number	Attenuation (dB)	Flatness	Return Loss (dB)	Outline
SFAP-0dB	0	+/20	>18	<u>PDF</u>
SFAP-1dB	1	+/20	>18	<u>PDF</u>
SFAP-2dB	2	+/20	>18	<u>PDF</u>
SFAP-3dB	3	+/20	>18	<u>PDF</u>
SFAP-4dB	4	+/20	>18	<u>PDF</u>
SFAP-5dB	5	+/20	>18	<u>PDF</u>
SFAP-6dB	6	+/25	>18	<u>PDF</u>
SFAP-7dB	7	+/25	>18	<u>PDF</u>
SFAP-8dB	8	+/25	>18	<u>PDF</u>
SFAP-9dB	9	+/25	>18	<u>PDF</u>
SFAP-10dB	10	+/25	>18	<u>PDF</u>
SFAP-11dB	11	+/30	>18	
SFAP-12dB	12	+/30	>18	<u>PDF</u>
SFAP-13dB	13	+/30	>18	<u>PDF</u>
SFAP-14dB	14	+/30	>18	<u>PDF</u>
SFAP-15dB	15	+/30	>18	<u>PDF</u>
SFAP-16dB	16	+/40	>18	<u>PDF</u>
SFAP-17dB	17	+/40	>18	<u>PDF</u>
SFAP-18dB	18	+/40	>18	<u>PDF</u>
SFAP-19dB	19	+/40	>18	<u>PDF</u>
SFAP-20dB	20	+/40	>18	<u>PDF</u>
SFAP-21dB	21	+/50	>18	
SFAP-22dB	22	+/50	>18	<u>PDF</u>
SFAP-23dB	23	+/50	>18	
SFAP-24dB	24	+/50	>18	
SFAP-25dB	25	+/50	>18	<u>PDF</u>
SFAP-26dB	26	+/60	>18	
SFAP-27dB	27	+/60	>18	
SFAP-28dB	28	+/60	>18	<u>PDF</u>
SFAP-29dB	29	+/60	>18	<u>PDF</u>
SFAP-30dB	30	+/60	>18	<u>PDF</u>

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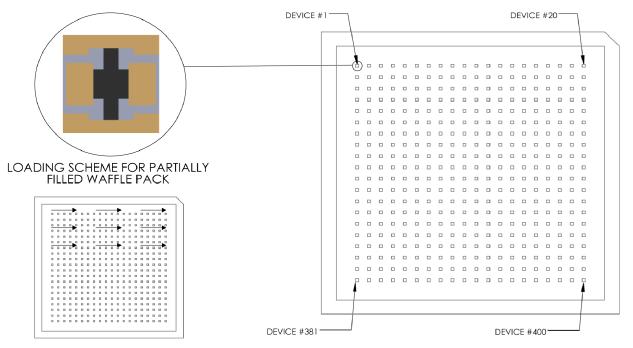
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# **SFAP Attenuator Series**

## **Device Orientation Within Packaging**



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