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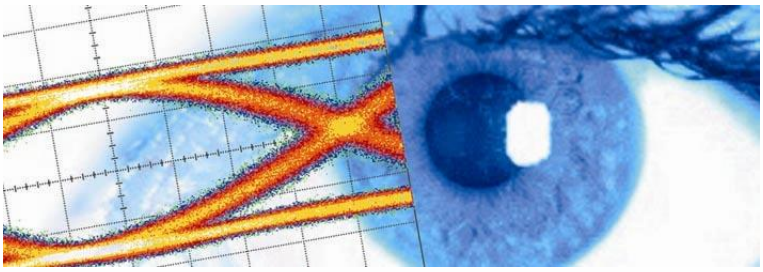


Datasheet

SHF ATT110 A –20 dB

110 GHz Attenuator

Description

The SHF ATT110 A -20 dB is a compact, high-performance attenuator with a bandwidth exceeding 110 GHz and a very flat frequency response (S_{21} = 20±1 dB).

Its small footprint makes it particularly suitable for differential applications, where signals entering or leaving close-spaced connectors need to be attenuated simultaneously.
Furthermore, dedicated screw holes on the back side allow secure installation on a mounting plate for stable system integration.

Fully customizable 1.0-mm connector configurations as well as between series (1.0-mm ↔ 1.85-mm) configurations are available to meet individual requirements of the customer and to avoid additional adapters in the setup.

A broad range of attenuation values are available within the same series (ATT110 A -xx dB).

Applications

- Optical Communications
- High-Speed Pulse Experiments
- Research and Development
- Test Instrumentation
- 5G
- Automotive
- System Integration

Configurations

- WFWM - 1.0-mm female to 1.0-mm male
- WFWF - 1.0-mm female to 1.0-mm female
- WMWM - 1.0-mm male to 1.0-mm male
- WFVM - 1.0-mm female to 1.85-mm male
- VFWM - 1.85-mm female to 1.0-mm male
- VFWF - 1.85-mm female to 1.0-mm female
- WMVM - 1.0-mm male to 1.85-mm male

Product Code Example

- SHF ATT110 A - 20 dB - WFWM

Brand: SHF
Type: 110 GHz Attenuator
Revision: A
Typ. Insertion loss: 20 dB
Connector Configuration: 1.0 mm female to 1.0 mm male

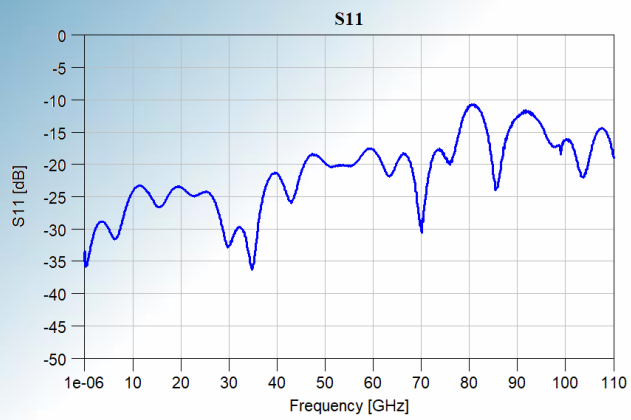
Specifications - SHF ATT110 A -20dB[1]

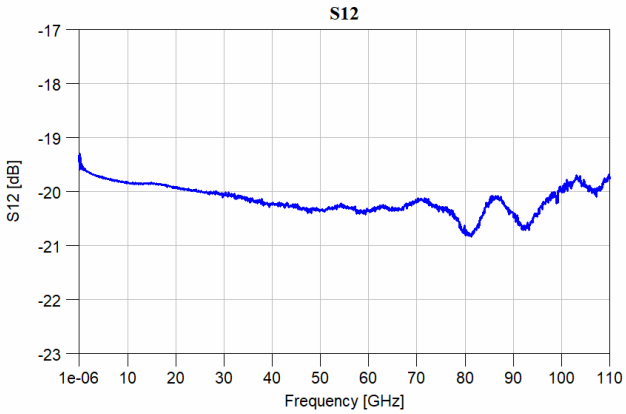
Parameter	Unit	Symbol	Min	Typ	Max	Conditions
Absolute Maximum Ratings						
Maximum RF Input	W	$P_{in,max}$			1	
Operating Temperature	°C	T_{case}	10	25	50	

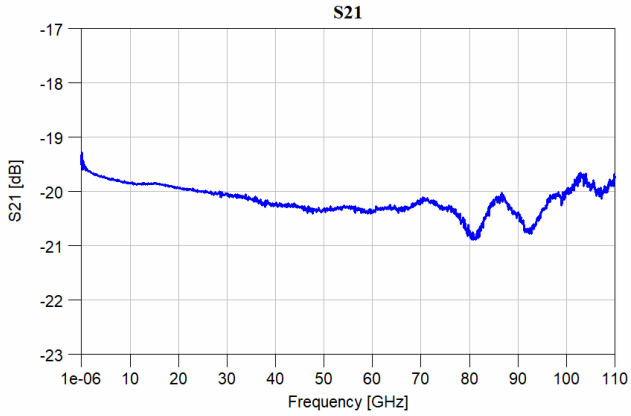
Parameter	Unit	Symbol	Min	Typ	Max	Conditions
Electrical Characteristics (At 25°C case temperature, unless otherwise specified)						
Frequency Range	GHz	f	DC		110	
Insertion loss	dB	IL	19	20	21	f < 110 GHz
Return Loss	dB	RL	20 12 10			f < 25 GHz 25 GHz < f < 70 GHz 70 GHz < f < 110 GHz
Mechanical Characteristics						
Connectors						1.0 mm / 1.85 mm
Dimensions	mm			18 42.1 9		Width Length Height

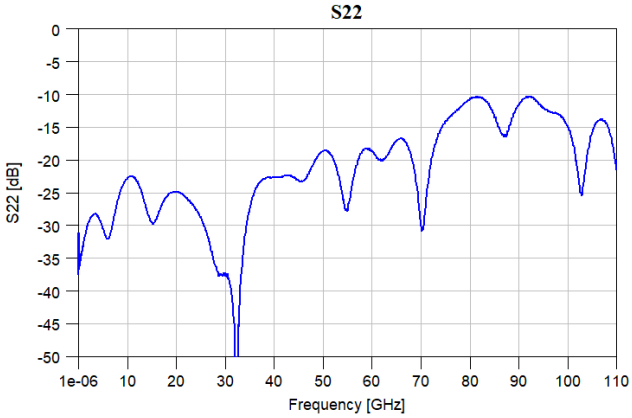
[1] These specifications are valid for the WFWM configuration.

Typical S-Parameters[2]



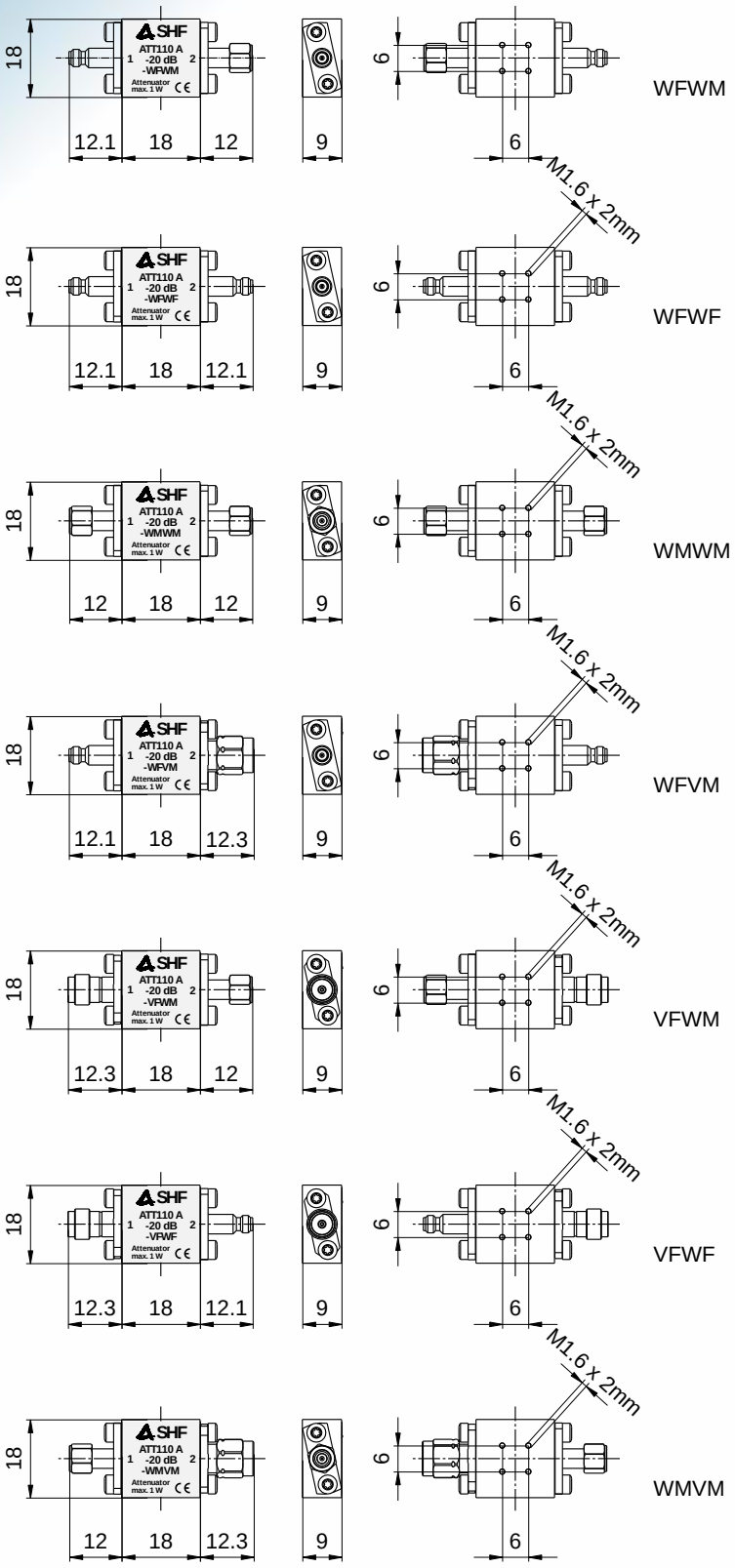






[2] These typical S-Parameters are valid for the WFWM configuration: 1.0-mm female to 1.0-mm male.

Mechanical Drawings



All dimensions in mm