

HVAT-3K Series High Voltage Pulse Attenuator



1. Description

The HVAT-3K Series High Voltage Pulse Attenuator is used to attenuate high voltage pulse signals in a 50 Ω system. It consists of highly surge-robust components with great voltage linearity. The device is symmetrical (input and output can be exchanged).

Note: HVAT-3K is the replacement model of our previous HVAT-S HV pulse attenuator.

2. Features

- Surge robust attenuator with great voltage linearity
- Wide frequency measurement capability from DC up to 3.5 GHz
- Symmetrical design, Input and output can be exchanged
- SMA interface, up to 3 kV peak pulse capability
- Customization attenuation design available

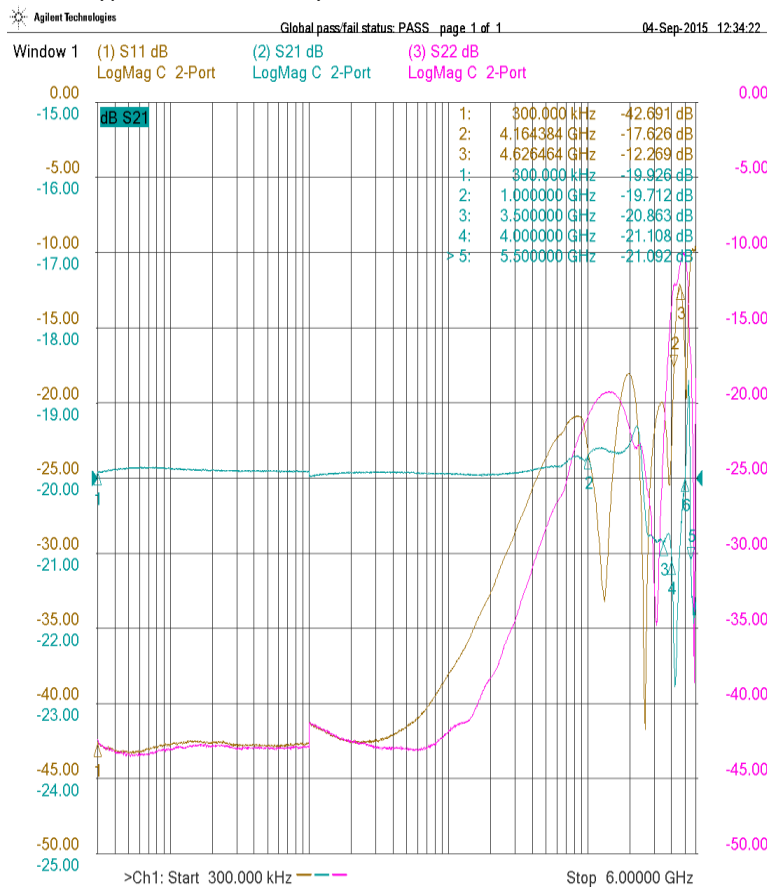
3. Applications

- High voltage pulse measurement
- Pulse generator waveform calibration, such as Transmission Line Pulse (TLP), Electrical Fast Transient (EFT), etc...

4. Specifications

Parameters	Value	Unit	Comments
Nominal Impedance	50	Ohm	< ± 2 Ohm
Usable Frequency Range	DC – 3.5	GHz	
Nominal Attenuation	3, 6, 10, 20	dB	(±1) dB
Nominal Return Loss	≤ -15	dB	
Peak Pulse Voltage	3	kV	3 kV @ 500 ns or 1.5kV @ 2000 ns TLP pulse
Peak Pulse Power	180	kW	tested at 1 pulse per second repetition rate
Dimensions	76 X 40 X 25	mm	
Weight	About 90	g	

Typical Network Analyzer Measurement is shown below:



5. Ordering Information

Line	Part # or Option #	Description
1	HVAT-3K3-3.5	3 (±1) dB, DC-3.5 GHz, 3kV HV Pulse Attenuator with SMA Connector
2	HVAT-3K6-3.5	6 (±1) dB, DC-3.5 GHz, 3kV HV Pulse Attenuator with SMA Connector
3	HVAT-3K10-3.5	10 (±1) dB, DC-3.5 GHz, 3kV HV Pulse Attenuator with SMA Connector

4	HVAT-3K20-3.5	20 (± 1) dB, DC-3.5 GHz, 3kV HV Pulse Attenuator with SMA Connector
----------	---------------	---------------------------------------------------------------------------

Customized attenuator design is available upon request