

## TVS-10G Transient Voltage Suppressor, DC - 10 GHz



### 1. Description

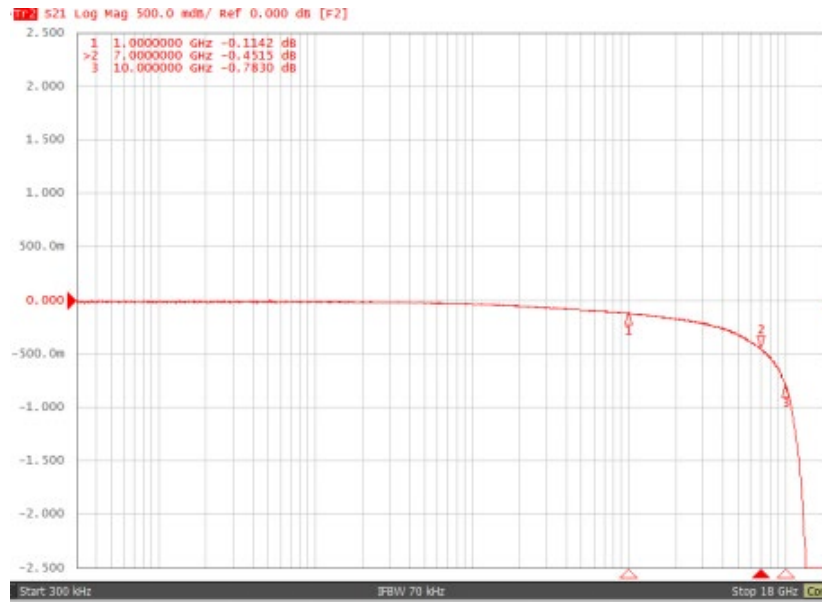
The model TVS-10G is an ultra-high bandwidth transient voltage suppressor functional from DC – 10 GHz. This device is designed to protect oscilloscopes from high frequency, high voltage transients, such as ESD measurement. The TVS-10G will clamp any high voltage transient and is matched to 50  $\Omega$  system.

### 2. Features

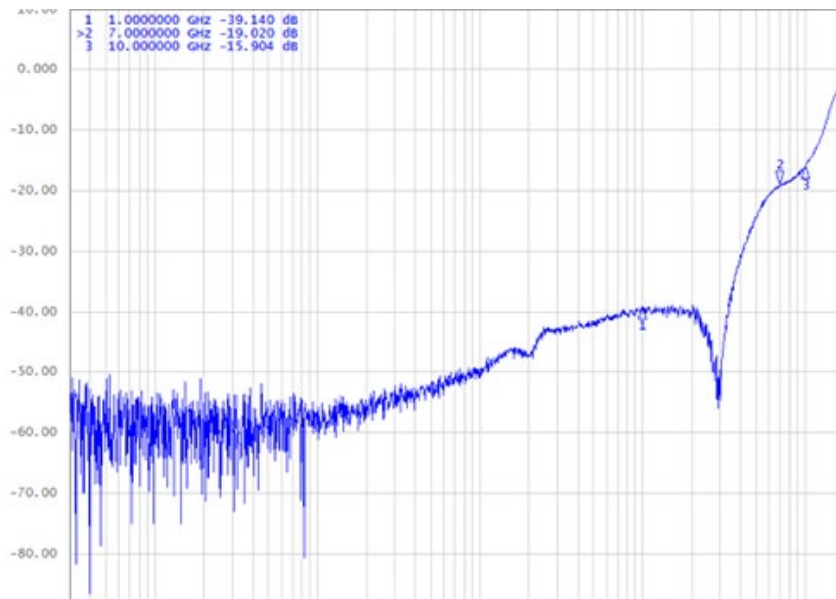
- Functional for a wide bandwidth (DC – 10 GHz)
- Clamps high frequency, high voltage transients to around  $\pm 6V$
- Useful for IEC 61000-4-2 contact and air discharge up to  $\pm 20 kV$
- Matched to 50  $\Omega$  system
- Insertion loss at 10 GHz approximately 0.8 dB
- Return loss at 1 GHz less than 35 dB

### 3. Applications

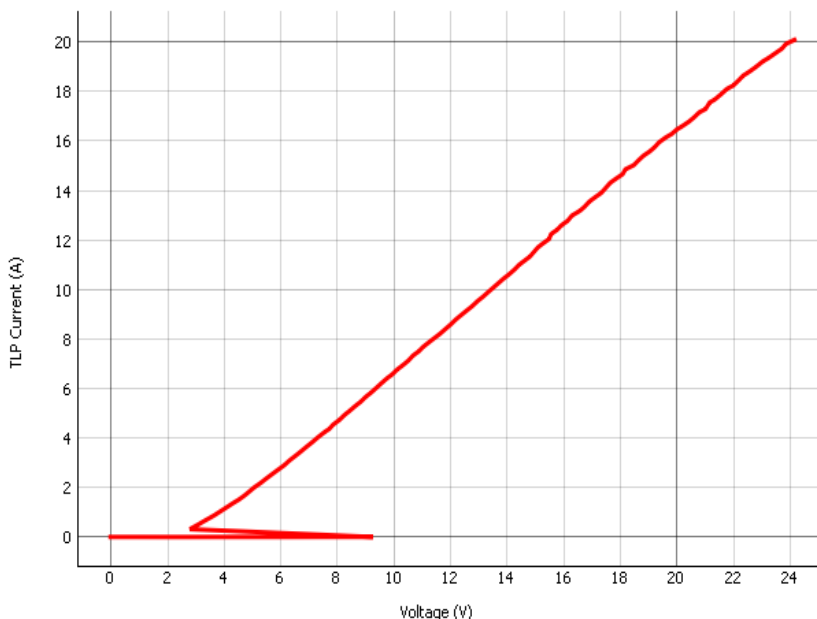
- Oscilloscope protection for high frequency, high voltage measurements
- General protection device for measurements in a 50  $\Omega$  system



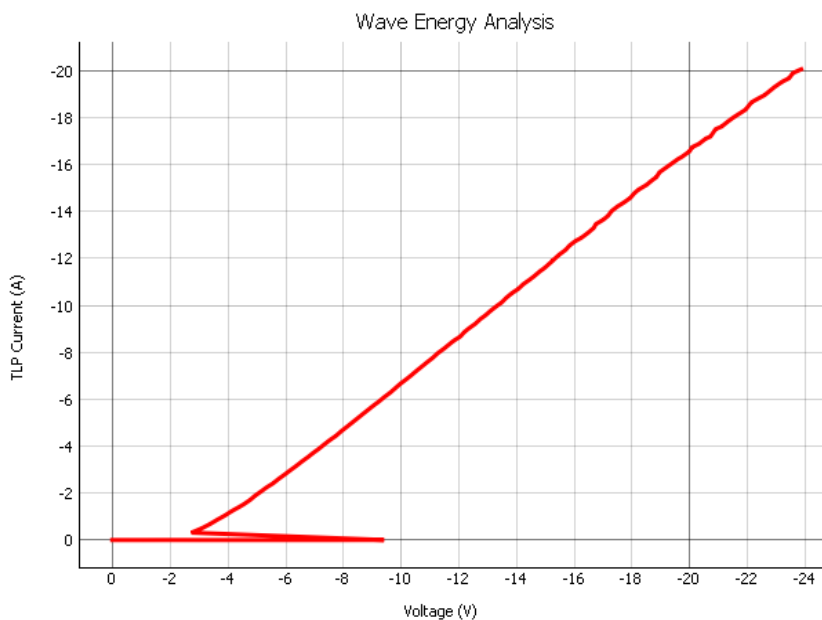
*Figure 1: Insertion Loss (S21)*



*Figure 2: Return Loss (S11)*



**Figure 3: Positive TLP IV Curve**

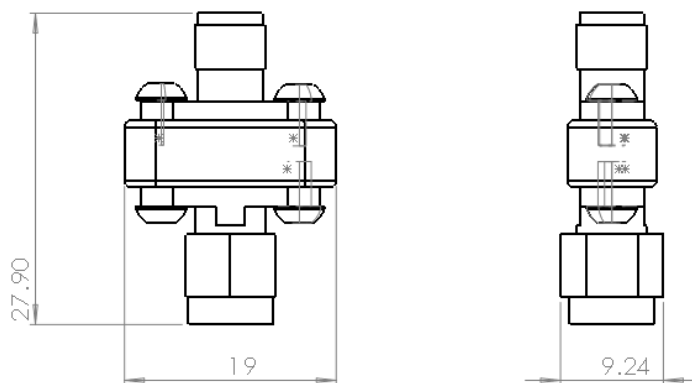


**Figure 4: Negative TLP IV Curve**

## 4. Specifications

Specifications	Parameter	Unit	Comments
Clamping voltage	± 6	V	Depends on pulse level
Maximum rated ESD Level	± 20	kV	IEC 61000-4-2 contact and air (ESD)
Maximum rated Surge Level	3.6	A	8/20 μs
Bandwidth	DC – 10	GHz	
Impedance	50	Ω	From DC – 10 GHz
Weight	8	g	

## 5. Dimensions



## 6. Ordering Information

Part Number	Description	Lead Time
TVS-10G	DC-10 GHz Wideband Transient Voltage Suppressor	1-3 weeks