

## TVS-15G Transient Voltage Suppressor, DC - 15 GHz



### 1. Description

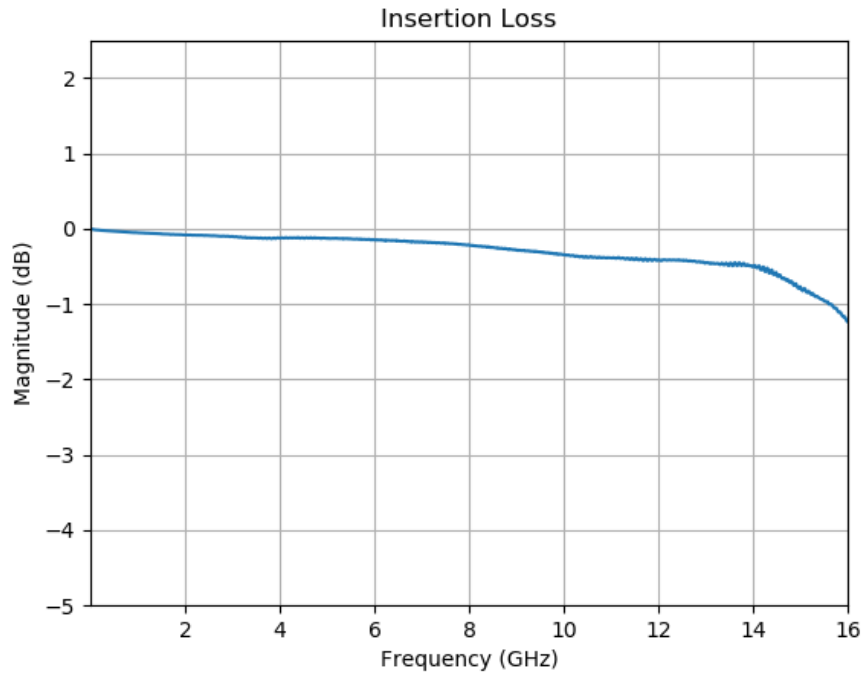
The model TVS-15G is an ultra-high bandwidth transient voltage suppressor functional from DC – 15 GHz. This device is designed to protect oscilloscopes from high frequency, high voltage transients, such as ESD measurement. The TVS-15G will clamp high voltage transients and is matched to 50  $\Omega$  system.

### 2. Features

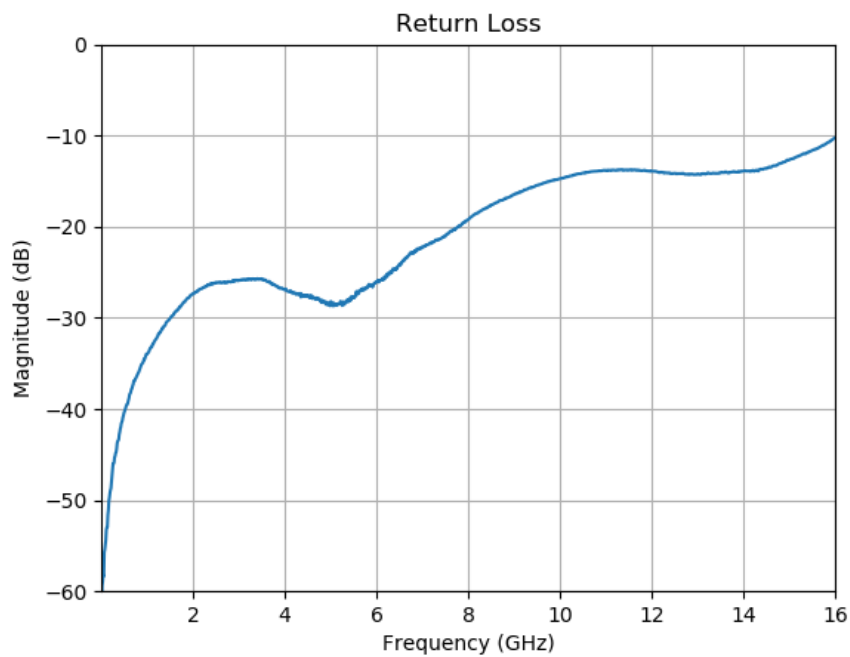
- Functional for a wide bandwidth (DC – 15 GHz)
- Clamps high frequency, high voltage transients to between  $\pm 6.2$  V and  $\pm 7.5$  V
- Useful for IEC 61000-4-2 contact and air discharge up to  $\pm 12$  kV and  $\pm 18$  kV, respectively
- Matched to 50  $\Omega$  system
- Insertion loss at 15 GHz approximately 0.8 dB
- Return loss at 1 GHz less than 30 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)**

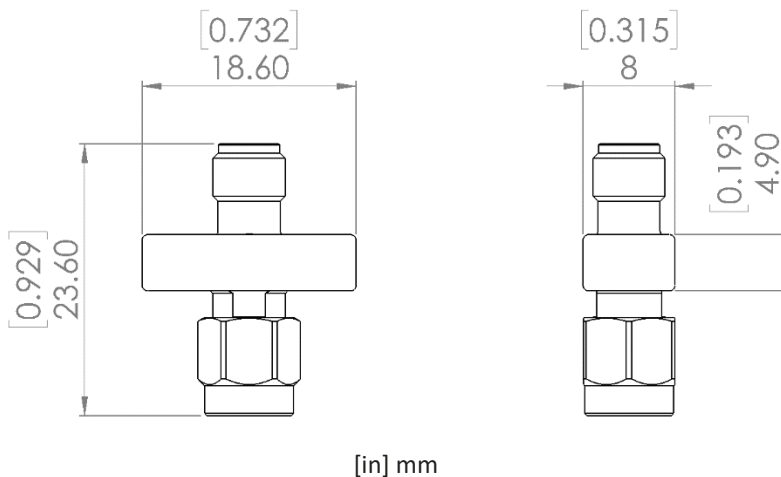


**Figure 2: Return Loss (S11)**

## 4. Specifications

Specifications	Parameter	Unit	Comments
Clamping voltage	$\pm 6.2 - \pm 7.5$	V	Depends on pulse level
Maximum rated ESD level (contact)	$\pm 12$	kV	IEC 61000-4-2 contact (ESD)
Maximum rated ESD level (air)	$\pm 18$	kV	IEC 61000-4-2 air (ESD)
Maximum rated surge level	2	A	8/20 $\mu$ s
TLP dynamic resistance	1.2	$\Omega$	4 A – 16 A
Bandwidth	DC – 15	GHz	
Impedance	50	$\Omega$	From DC – 15 GHz
Weight	8	g	

## 5. Dimensions



## 6. Ordering Information

Part Number	Description	Lead Time
TVS-15G	DC-15 GHz Wideband Transient Voltage Suppressor	1-3 weeks