



1-Line, Bi-directional, Transient Voltage Suppressor



Features

- Stand-off voltage: 5V Max
- Transient protection for each line according to
 - IEC61000-4-2(ESD): $\pm 30\text{kV}$ (contact)
 - IEC61000-4-4 (EFT): 40A (5/50ns)
 - IEC61000-4-5(surge): 6A (8/20 μs)
- Low leakage current
- Low clamping voltage
- Low clamping voltage:
 $V_{CL} = 10\text{V typ. @ IPP} = 16\text{A (TLP)}$
- RoHS Compliant

Applications

- Cellular handsets
- Tablets
- Laptops
- Network communication devices
- Other portable devices

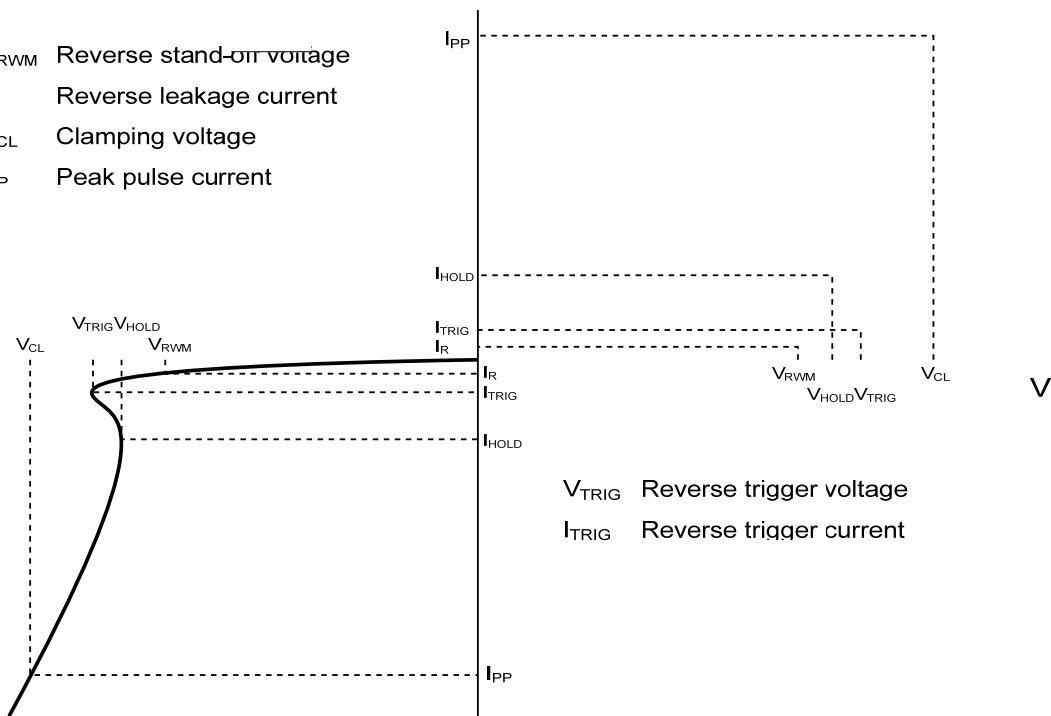
Mechanical Data

- Package: SOD-523
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- Moisture Sensitivity: Level 1 per J-STD-020
- Marking Information: See Below



■Definitionu

V_{RWM} Reverse stand-off voltage
 I_R Reverse leakage current
 V_{CL} Clamping voltage
 I_{PP} Peak pulse current





ESD5V0D5BS1

■Maximum Ratings

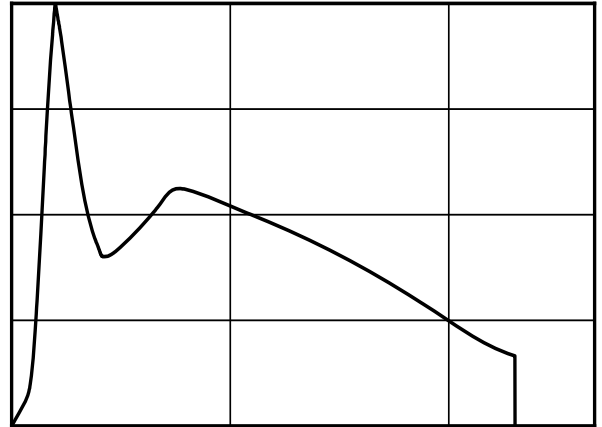
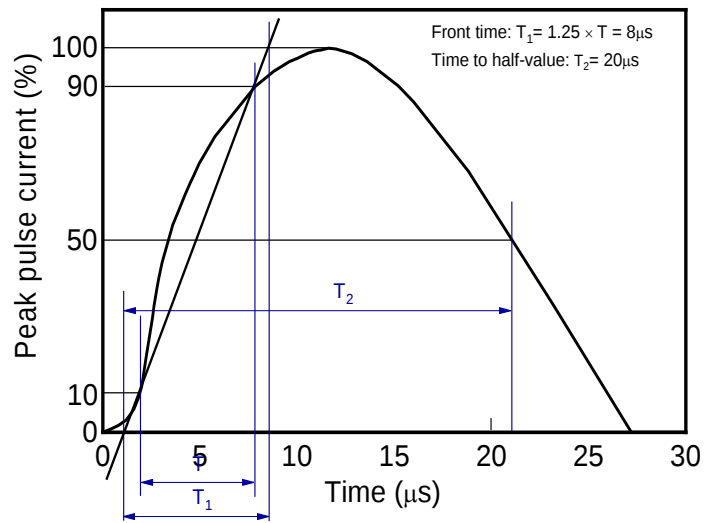
PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	72	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	6	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	kV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	125	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

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■ Characteristics (Typical)

Fig.1 8/20 μ s waveform per IEC61000-4-5





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