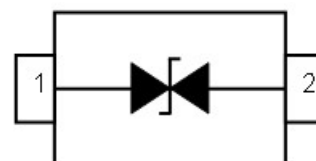


FEATURES

- IEC61000-4-2 (ESD) $\pm 8\text{kV}$ (Contact),
 $\pm 15\text{kV}$ (Air)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Peak power dissipation: 45W (8/20 μs)
- Protects one I/O line
- Low clamping voltage
- Working voltages : 5V
- Low leakage current



MACHANICAL DATA

- SOD-523 package
- Terminals: Tin plated, solderable per MIL-STD-750, method 2026
- Packaging: Tape and Reel
- Reel size: 7 inch

APPLICATIONS

- High Speed Line :USB1.0/2.0, VGA, DVI, SDI,
- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Projection TV
- Cellular handsets and accessories
- Portable instrumentation
- Peripherals

ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	± 8 ± 15	kV
P_{PP}	Peak Pulse Power (8/20 μ s)	45	W
T_{OPT}	Operating Temperature	-40~150	°C
T_{STG}	Storage Temperature	-40~150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	5.6			V
I_R	Reverse Leakage Current	$V_{RWM} = 5\text{V}$			1.0	μA
V_C	Clamping Voltage	$I_{PP} = 1\text{A}$, $t_p = 8/20\mu\text{s}$			10.0	V
V_C	Clamping Voltage	$I_{PPmax} = 3\text{A}$, $t_p = 8/20\mu\text{s}$			15.0	V
C_J	Junction Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$			12	pF

ELECTRICAL CHARACTERISTICS CURVE

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

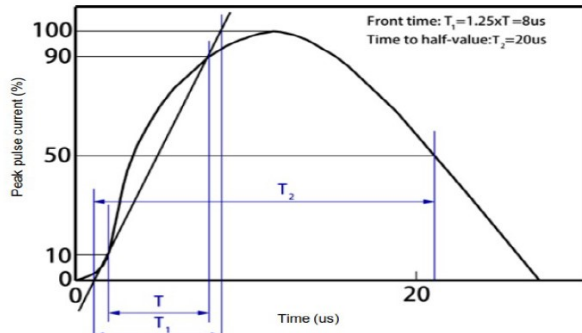


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

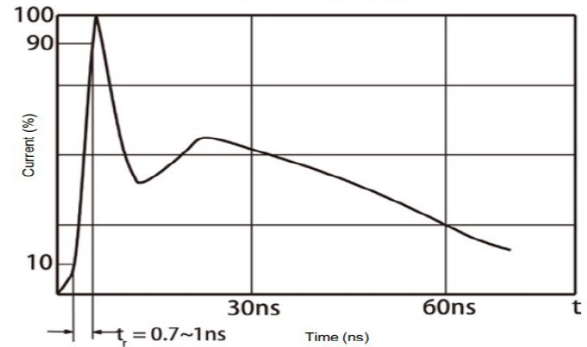


Fig 3 Power Derating Curve

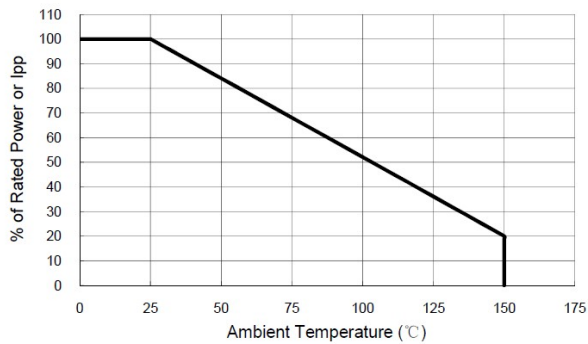


Fig 4 Voltage Sweeping

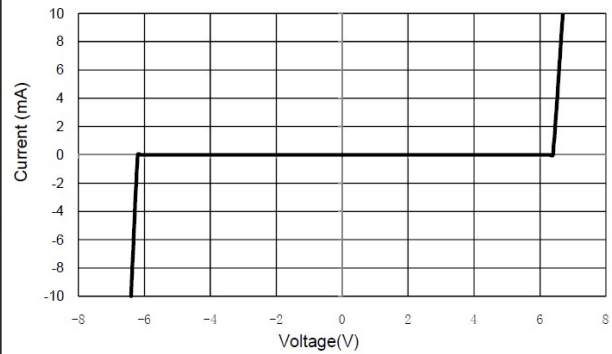


Fig 5 Voltage vs Capacitance

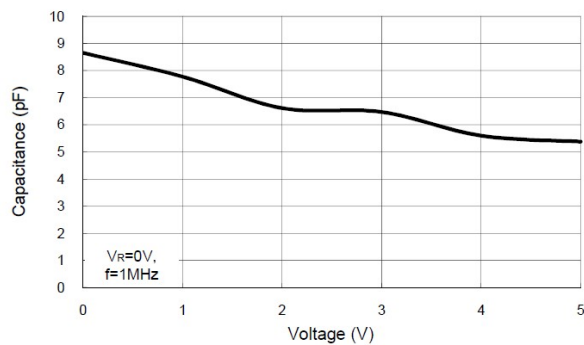
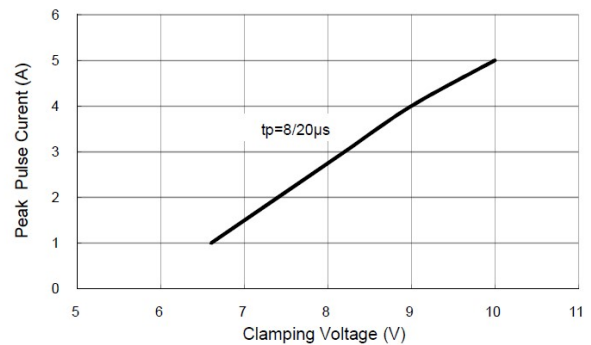
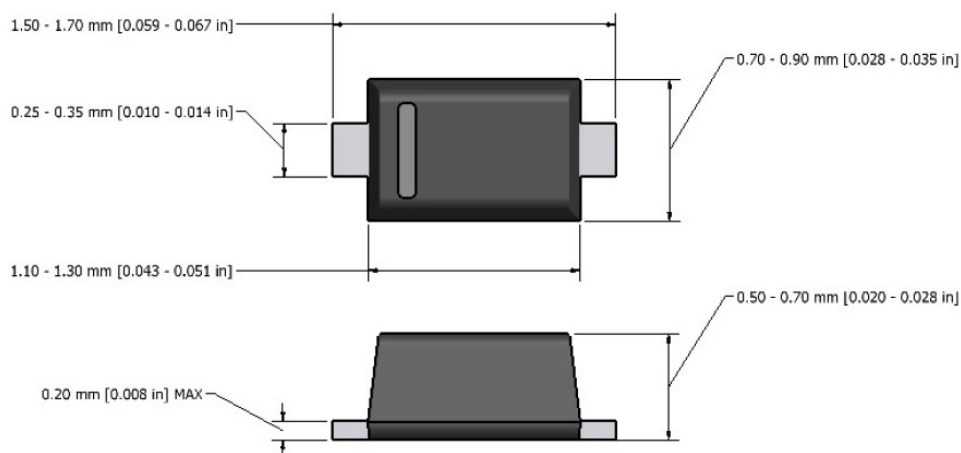



Fig 6 Clamping Voltage vs Peak Pulse Current



SOD-523 PACKAGE OUTLINE DIMENSIONS



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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