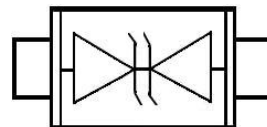


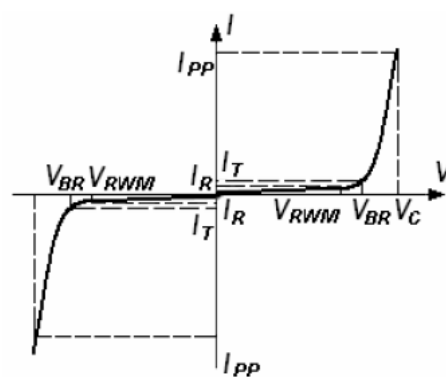
Description

The PESDNC5D5VB protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events. They feature large cross-sectional area junctions for conducting high transient currents, offer desirable electrical characteristics for board level protection, such as fast response time, low operating voltage. It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.



Feature

- 200W peak pulse power per line ($t_P = 8/20\mu s$)
- SOD-523 package
- Replacement for MLV(0603)
- Bidirectional configurations
- Response Time is Typically < 1 ns
- ESD protection > 16 kV
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC 61000-4-2(ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact); IEC 61000-4-4 (EFT) 40A (5/50ns)



Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_t = 1mA$	5.6	6.7	7.8	V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$ $T=25^\circ C$			1.0	μA
Junction Capacitance	C_j	$V_R=0V$ $f = 1MHz$		32		pF

Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Unidirectional Peak Pulse Power	P_{pp}	200	W
Operating Temperature	T_J	-55 to +150	$^\circ C$
Storage Temperature	T_{STG}	-55 to +150	$^\circ C$

Typical Characteristics

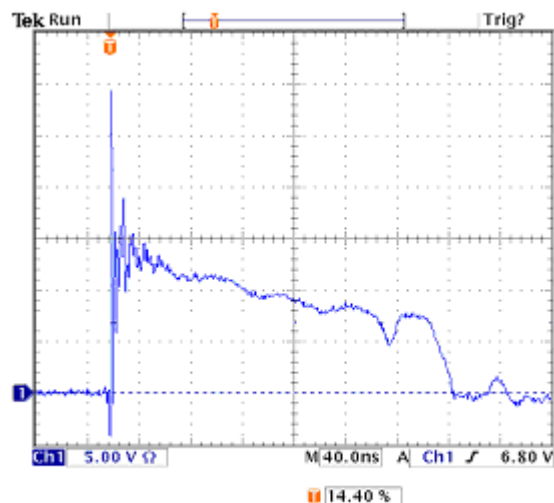


Figure 1. Positive 8 kV Contact per IEC 6100-4-2

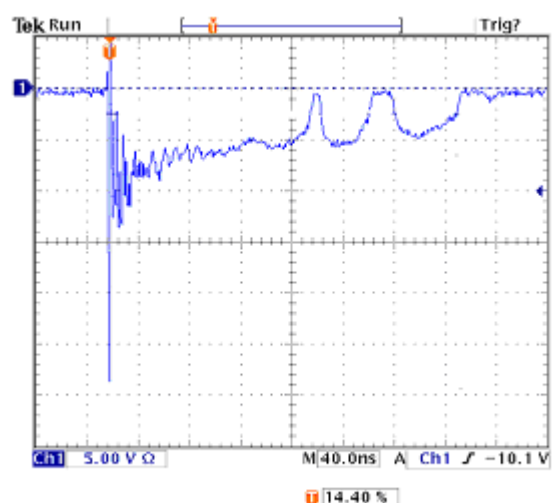
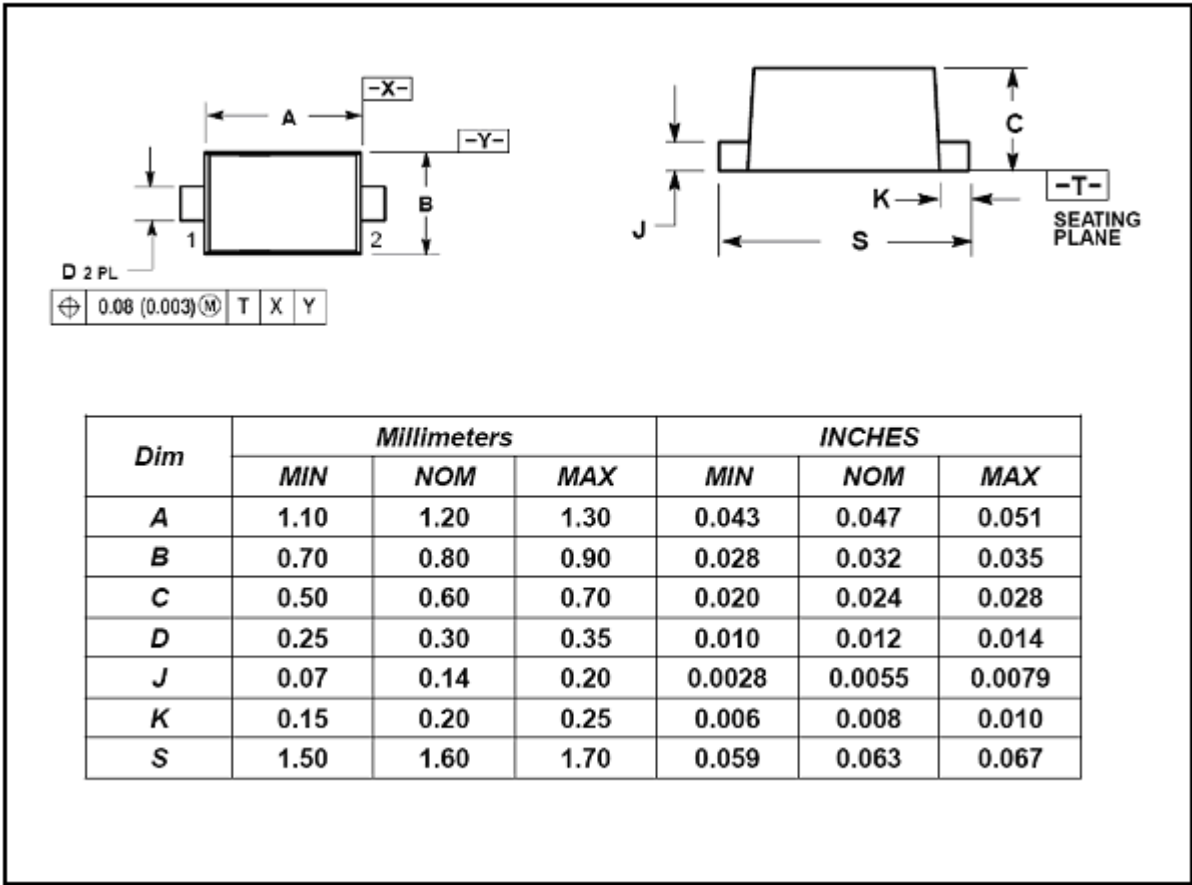



Figure2 . Negative 8 kV Contact per IEC 6100-4-2

Product dimension



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