



Micro Commercial Components



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ESD12VD3B

12 Volts
ESD Protection
Devices

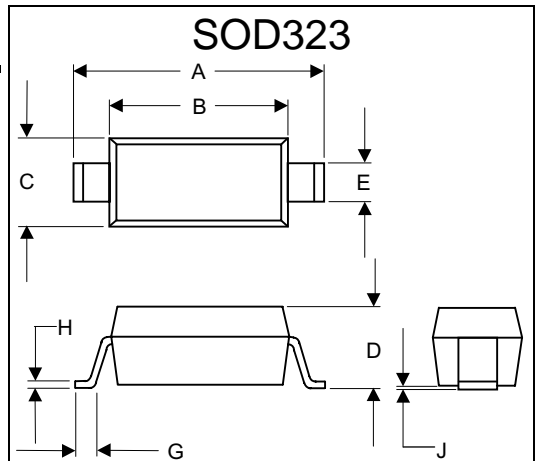
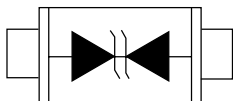
Features

- Halogen free available upon request by adding suffix "-HF"
For sensitive ESD protection
Low clamping voltage
Low leakage
Protects one power or I/O port
ESD protection > 35 kV
Fast response ,response time less than 1ns.
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1

Maximum Ratings

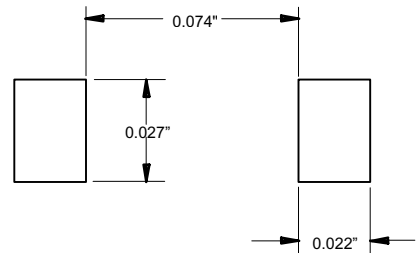
- Operating Junction & Storage Temperature: -55°C to +150°C

Table with 5 columns: Parameter, Symbol, Limits, unit. Rows include IEC61000-4-2(ESD) Air Contact, IEC 61000-4-4 (EFT) (5/50ns), and Peak Pulse Power (tp=8/20µS).



DIMENSIONS table with columns: DIM, INCHES (MIN, MAX), MM (MIN, MAX), NOTE. Rows A through J.

SUGGESTED SOLDER PAD LAYOUT



ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse stand-off voltage	V_{RWM}				12	V
Reverse Breakdown voltage	V_{BR}	$I_t = 1\text{mA}$	13.5			V
Reverse Leakage Current	I_R	$V_{RWM} = 12\text{V } T=25^\circ\text{C}$			1	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A } t_P = 8/20\mu\text{s}$			15.5	V
Junction Capacitance	C_j	$V_R=0\text{V } f = 1\text{MHz}$		80	100	pF

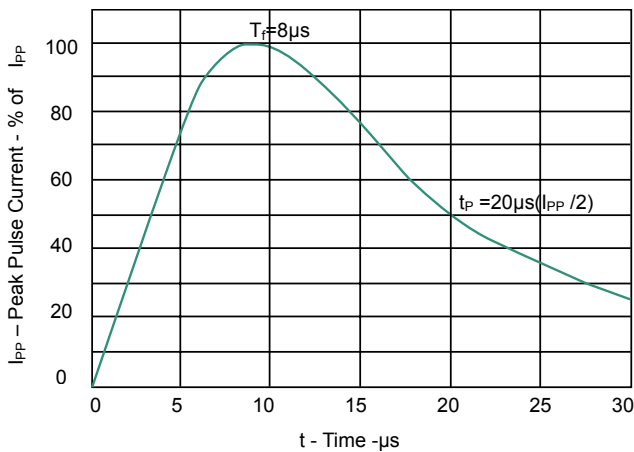


Fig 1. Pulse Waveform

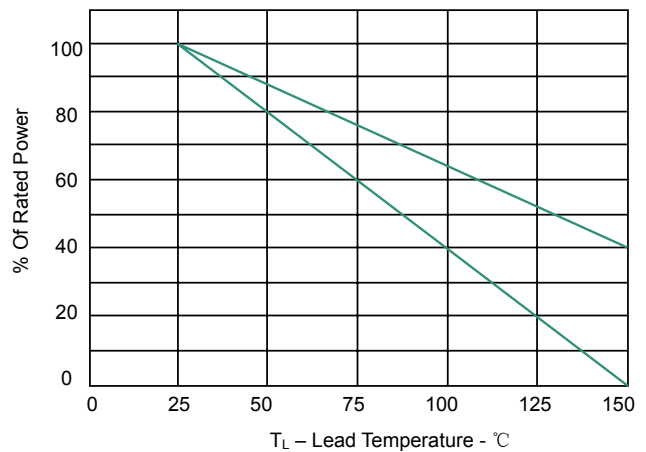


Fig 2. Power Derating Curve



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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