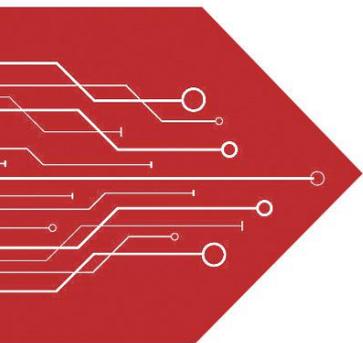


MSKSEMI

SEMICONDUCTOR



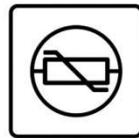
ESD



TVS



TSS



MOV



GDT



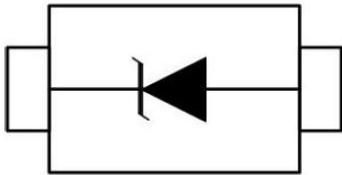
PLED

Product data sheet



SOD-323

PIN CONFIGURATION



FEATURES

- ✧ Transient protection for high-speed data lines
IEC 61000-4-2 (ESD) ±30kV (Contact)
±30kV (Air)
- ✧ Peak power dissipation: 1260W (8/20μs)
- ✧ Working voltages : 4.5V
- ✧ Low leakage current
- ✧ Low clamping voltage
- ✧ Solid-state silicon-avalanche technology

MACHANICAL DATA

- ✧ SOD-323 package
- ✧ Flammability Rating: UL 94V-0
- ✧ High temperature soldering guaranteed:
260°C/10s
- ✧ Packaging: Tape and Reel
- ✧ Reel size: 7 inch

APPLICATIONS

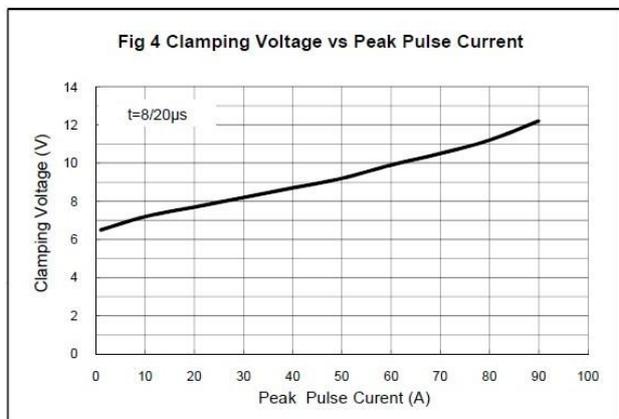
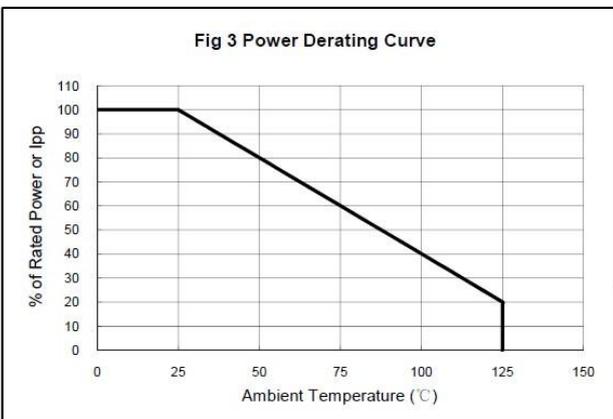
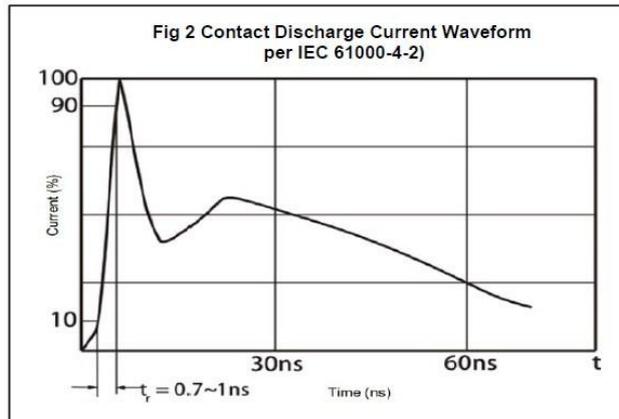
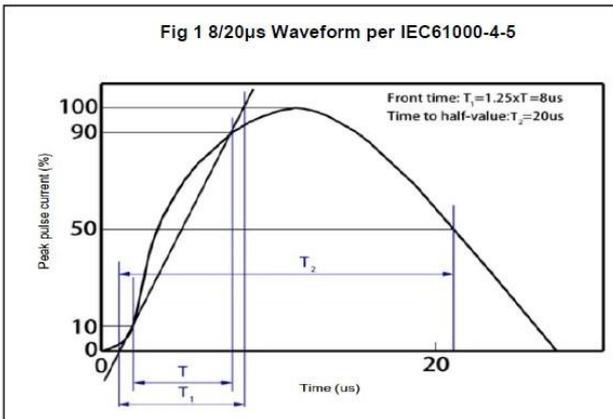
- ✧ Power lines
- ✧ Personal digital assistants (PDA's)
- ✧ Microprocessors based equipment
- ✧ Notebooks, Desktops, and Servers
- ✧ Cell phone Handsets and Accessories
- ✧ Portable Electronics
- ✧ Peripherals

ABSOLUTE MAXIMUM RATING			
Symbol	Parameter	Value	Units
V _{ESD}	ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	±30 ±30	kV
P _{PP}	Peak Pulse Power (8/20μs)	1260	W
I _{PP}	Peak Pulse Current (8/20μs)	90	A
T _{OPT}	Operating Temperature	-55~125	°C
T _{STG}	Storage Temperature	-55~150	°C
T _L	Lead Soldering Temperature	260(10sec)	°C

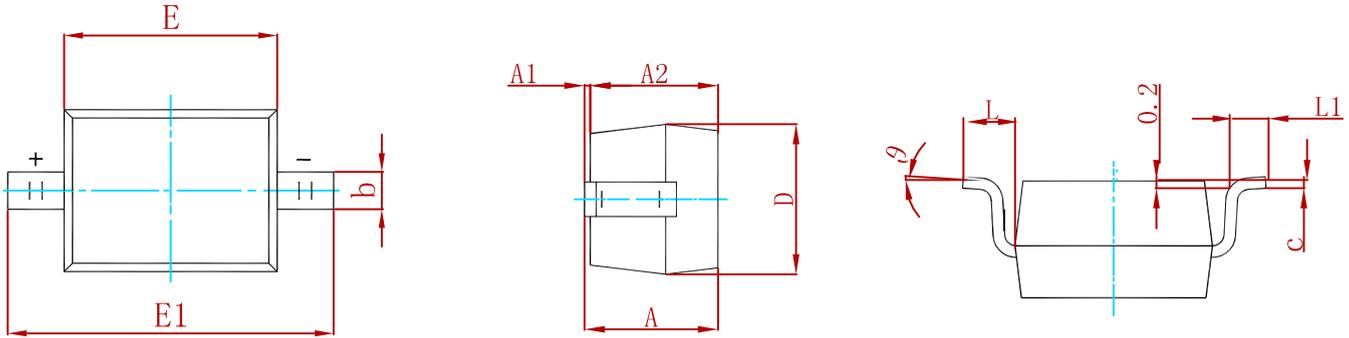
ELECTRICAL CHARACTERISTICS (Tamb=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				4.5	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	5.0		7.0	V
I_R	Reverse Leakage Current	$V_{RWM} = 4.5V$			0.5	μA
V_C	Clamping Voltage	$I_{PP} = 10A, t_p = 8/20\mu s$			9	V
		$I_{PP} = 90A, t_p = 8/20\mu s$			14	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$			850	pF

ELECTRICAL CHARACTERISTICS CURVE

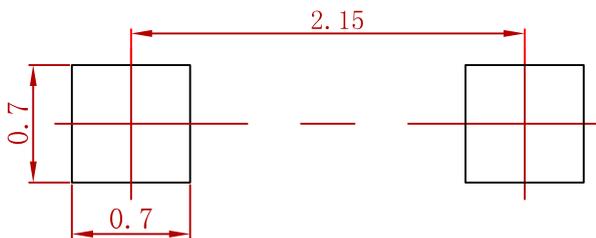


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



- Note:**
1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
PTVSHC3D5VU-MS	SOD-323	3000

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