

Features

- * 100W peak pulse power (8/20 µs)
- * Operating voltage: 3.3V
- * Ultra low clamping voltage
- * Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±20kV
 - Contact discharge: ±20kV
 - IEC61000-4-5 (SURGE) 4A (8/20us)

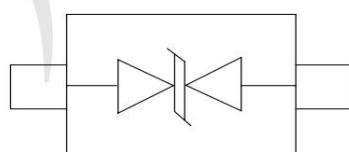
Mechanical Characteristics

- * Package: SOD-323
- * Ultra low leakage: nA level
- * Case Material: "Green" Molding Compound.
- * UL Flammability Classification Rating 94V-0
- * Moisture Sensitivity: Level 3 per J-STD-020
- * Shipping Qty :3000pcs/7Inch Tape & Reel

Applications

- * Mobile Phones and Accessories
- * Battery Protection
- * USB VBus
- * Power Line Protection
- * Hand Held Portable Applications

Dimensions and Pin Configuration



Marking:3C Or CC

Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	100	W
Peak Pulse Current (8/20μs)	Ipp	4	A
ESD per IEC 61000-4-2 (Air)	VESD	± 20	kV
ESD per IEC 61000-4-2 (Contact)		± 20	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			3.3	V	
Breakdown Voltage	VBR	5			V	IT = 1mA
Reverse Leakage Current	IR			0.08	uA	VRWM = 5V
Clamping Voltage	Vc			9	V	Ipp=1A(8x 20us pulse)
Clamping Voltage	Vc			14	V	Ipp=4A(8x 20us pulse)
Junction Capacitance	CJ		0.3		pF	VR = 0V, f = 1MHz

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

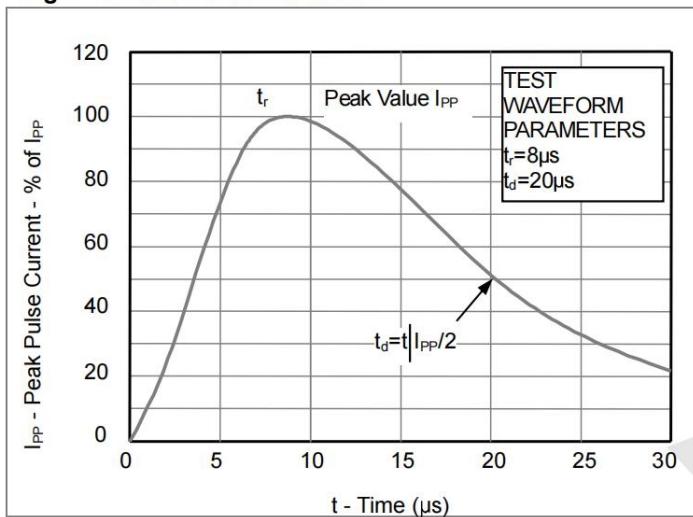


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

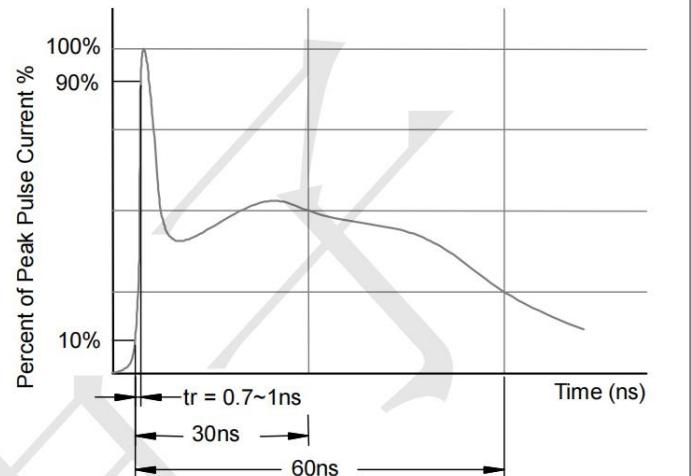
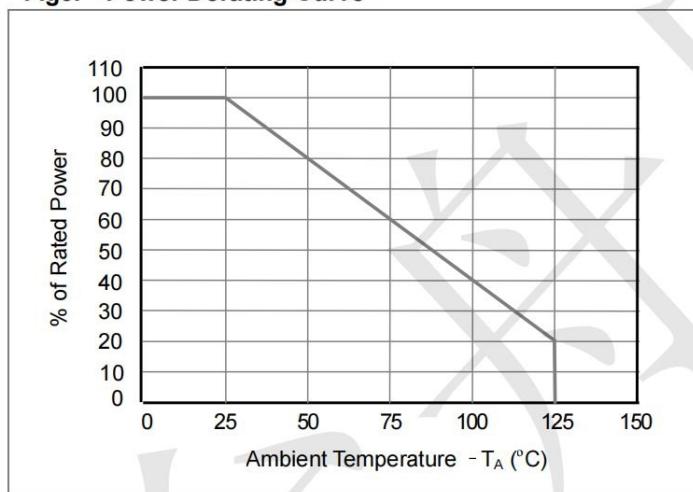


Fig3. Power Derating Curve





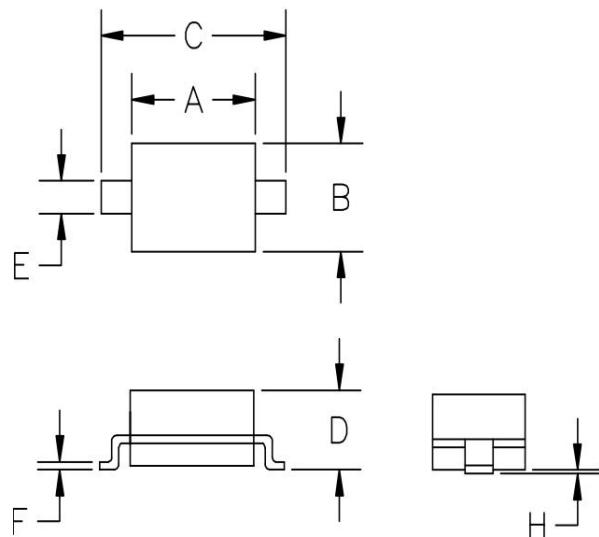
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1-Line Bi-directional Diode

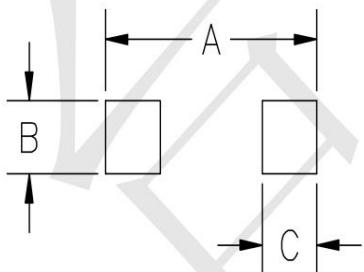
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SOD323 Package Outline Drawing (0805)



SYM	DIMENSIONS			
	MILLIMETERS	INCHES	MIN	MAX
A	1.50	0.060	1.80	0.071
B	1.20	0.045	1.40	0.054
C	2.30	0.090	2.70	0.107
D	-	0.043	1.10	-
E	0.30	0.012	0.40	0.016
F	0.10	0.010	0.25	0.004
H	-	0.004	0.10	0.004

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031

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