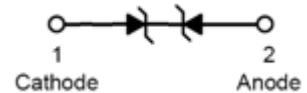


Features

- Small SOD-323 Package
- Unidirectional Configurations
- Peak Power Dissipation 350W @8 x 20 us Pulse
- Low Leakage
- Fast Response Time < 5 ns
- Protects One Power or I/O Port
- ESD Protection to IEC 61000-4-2 Level 4, 15KV(Air), 8KV(Contact)
- ESD Protection to IEC 61000-4-2 Level 4, 30A
- 16KV Human Body Model ESD Requirements
- RoHS Compliant in Lead-Free Versions



Applications

- Cell Phone Handsets and Accessories
- Microprocessor Based Equipment
- Personal Digital Assistant (PDA)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

Absolute Maximum Ratings

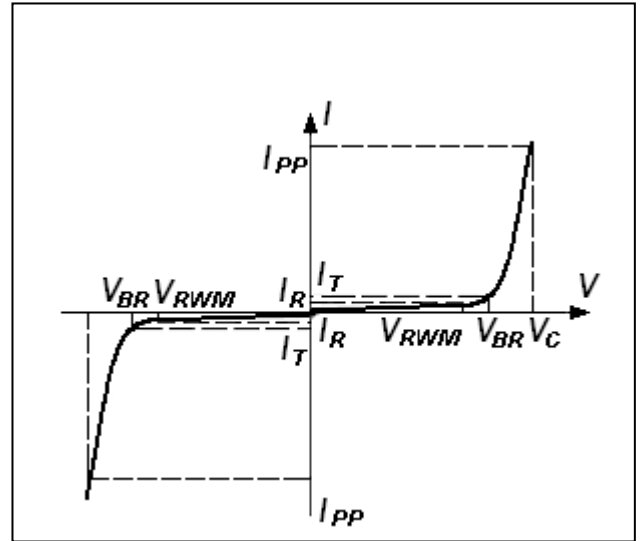
Parameter	Symbol	Value	Units
Peak Power Dissipation (Note 1.) @ $T_L = 25^\circ\text{C}$	P_{PK}	350	W
IEC 61000-4-2 (ESD)		Air	± 15 KV
		CONTACT	± 8.0 KV
IEC 61000-4-4 (EFT)		30	A
ESD Voltage Per Human Body Model	V_{PP}	16	KV
Storage Temperature Range	T_{STG}	-55 to 150	$^\circ\text{C}$
Operating Junction Temperature Range	T_J	-55 to 150	$^\circ\text{C}$

1. 8 X 20 us, non-repetitive

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Device	V_{RWM} (V)	I_R (uA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 1)		I_T	V_C (V) @ $I_{PP}=5 A^*$	V_C (V) @ Max I_{PP}^*	I_{PP} (A)*	C@OV 1MHz (pF)
	Max	Max	Min	Max	mA	Typ	Max	Max	Typ
SD03C	3.3	10	4.0	6.0	1.0	6.5	10.5	22	320
SD05C	5.0	10	6.2	7.3	1.0	9.8	14.5	20	200
SD12C	12	1.0	13.3	15.75	1.0	19	25	15	100
SD15C	15	1.0	16.7	19.05	1.0	23	28	12	100
SD24C	24	1.0	26.7	30.15	1.0	43	49	10	50

*Surge current waveform per Figure 1.

- V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

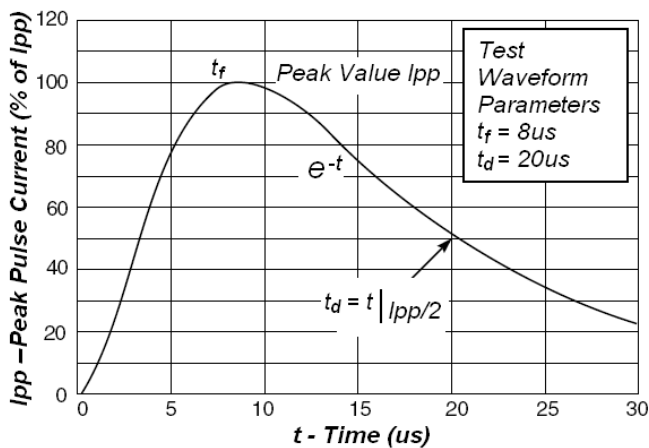


Fig1. Pulse Waveform

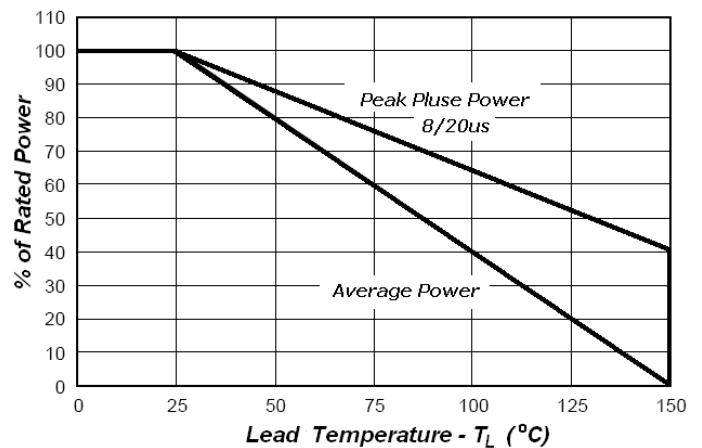
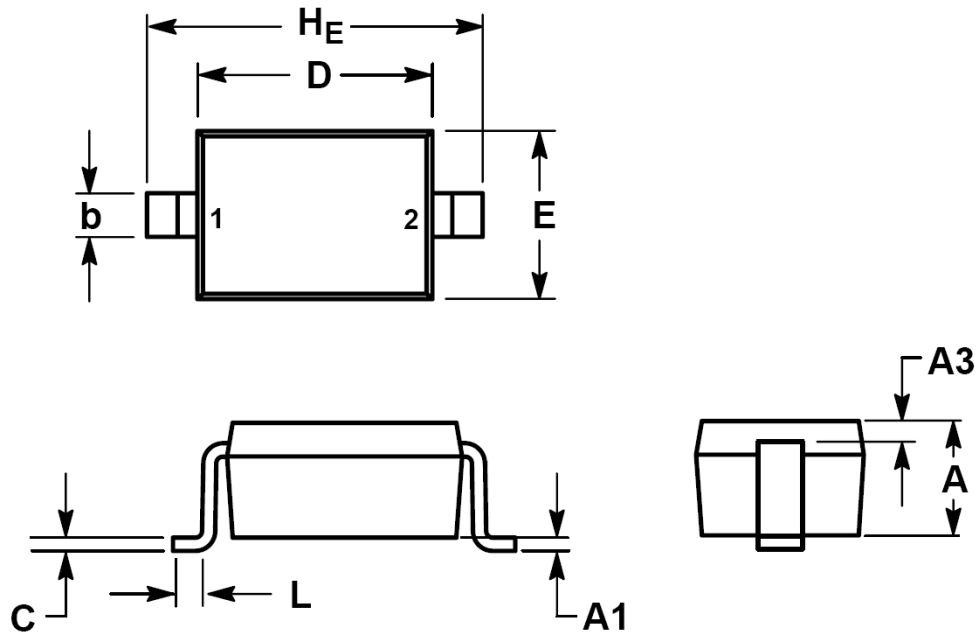


Fig2. Power Derating

Package Dimensions
SOD-323


<i>Dim</i>	<i>Millimeters</i>			<i>Inches</i>		
	<i>MIN</i>	<i>NOM</i>	<i>MAX</i>	<i>MIN</i>	<i>NOM</i>	<i>MAX</i>
<i>A</i>	0.80	0.90	1.00	0.031	0.035	0.040
<i>A1</i>	0.00	0.05	0.10	0.000	0.002	0.004
<i>A3</i>	0.15 REF			0.006 REF		
<i>b</i>	0.25	0.32	0.4	0.010	0.012	0.016
<i>C</i>	0.080	0.12	0.177	0.003	0.005	0.007
<i>D</i>	1.60	1.70	1.80	0.063	0.066	0.071
<i>E</i>	1.15	1.25	1.40	0.045	0.049	0.055
<i>L</i>	0.08			0.003		
<i>HE</i>	2.30	2.50	2.70	0.090	0.098	0.106