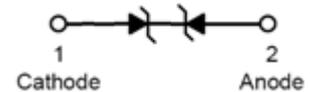
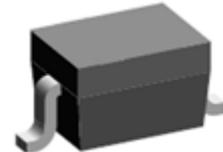




STANDARD CAPACITANCE TVS

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 CONTACT	± 15	KV
		± 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	$^{\circ}\text{C}$

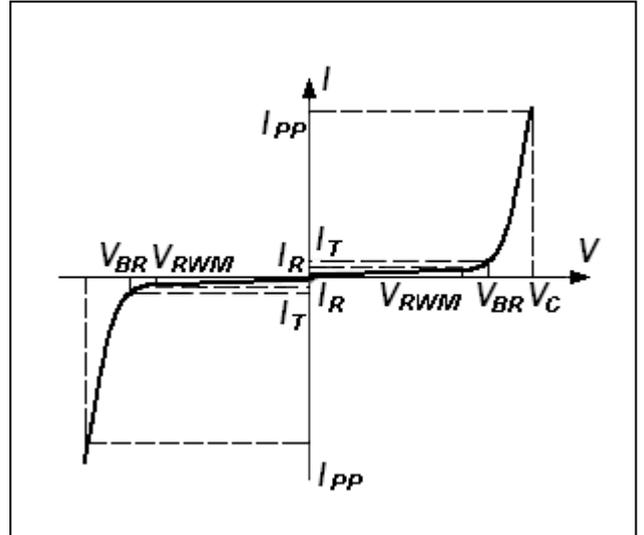
1. 8 X 20 us, non-repetitive

SD05C SERIES

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 (μ A) @ 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)*
	Max	Max	Min	Max	mA	Typ	Max	Max
SD03C	3.0	10	4.0	6.1	1.0	9.0	13.3	20
SD05C	5.0	10	6.2	7.3	1.0	9.8	14.5	20
SD12C	12	1.0	13.3	15.75	1.0	19	25	12

*Surge current waveform per Figure 1.

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

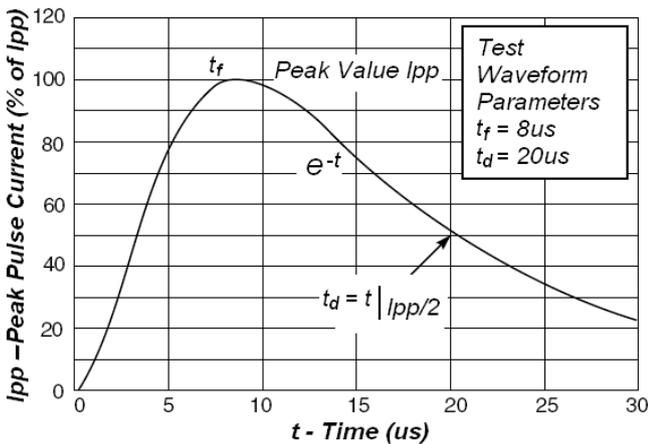


Fig1. Pulse Waveform

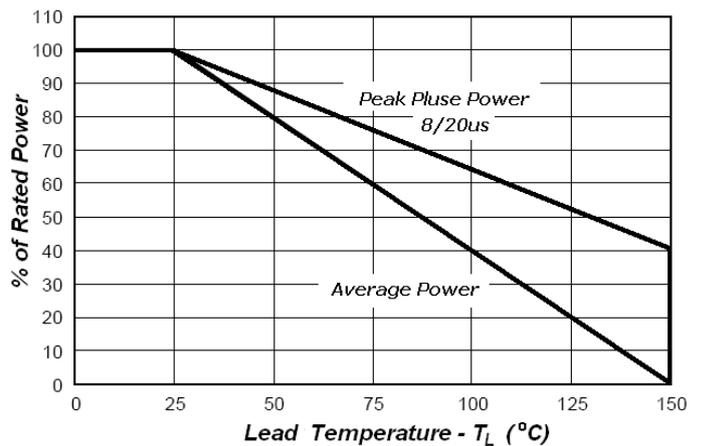
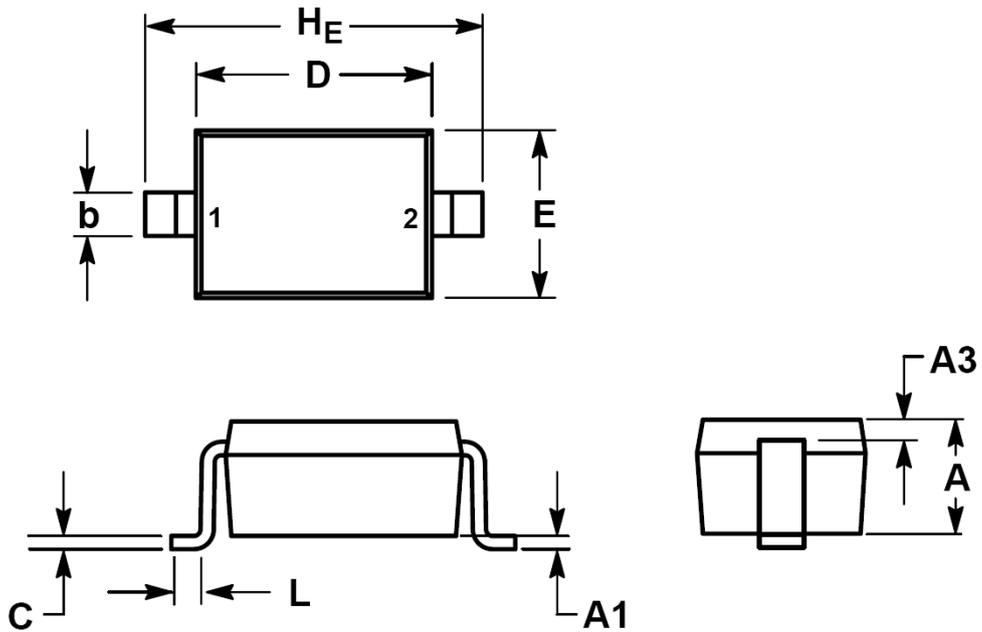


Fig2. Power Derating

SD05C SERIES

Package Dimensions

SOD-323



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