

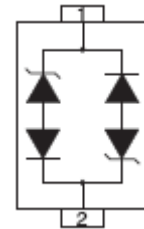
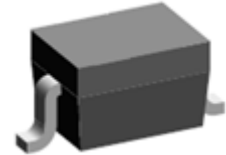


GBLC03C---GBLC24C

ULTRA LOW CAPACITANCE TVS ARRAY

Features

- Small SOD-323 Package
- Bi-directional 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
- USB Interface

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	$^\circ\text{C}$

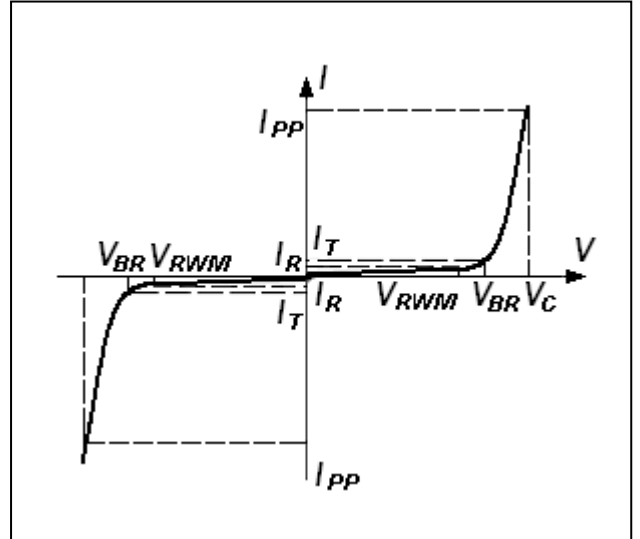
1. 8 X 20 us, non-repetitive

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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 2)	I_T (mA)	V_C (V) @ $I_P=1A$	V_C (V) @ I_{pp}	C (pF)
	Max	Max	Min		Max	Max	TYP
GBLC03C	3.0	20.0	4.0	1.0	5.15	13.9@8A	1.2
GBLC05C	5.0	5.0	6.0	1.0	9.80	18.3@8A	1.2
GBLC08C	8.0	5.0	8.5	1.0	13.40	18.5@8A	1.2
GBLC12C	12.0	1.0	13.3	1.0	19.00	28.6@6A	1.2
GBLC15C	15.0	1.0	16.7	1.0	24.00	31.8@5A	1.2
GBLC24C	24.0	1.0	26.7	1.0	43.00	56.0@3A	1.2

*Surge current waveform per Figure 1.

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

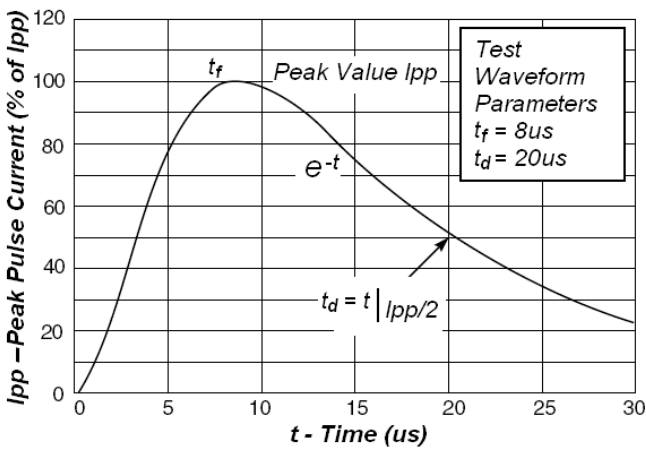


Fig1. Pulse Waveform

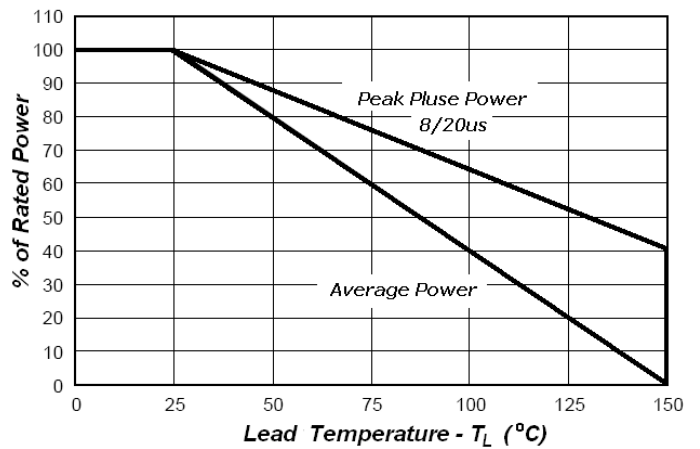


Fig2. Power Derating

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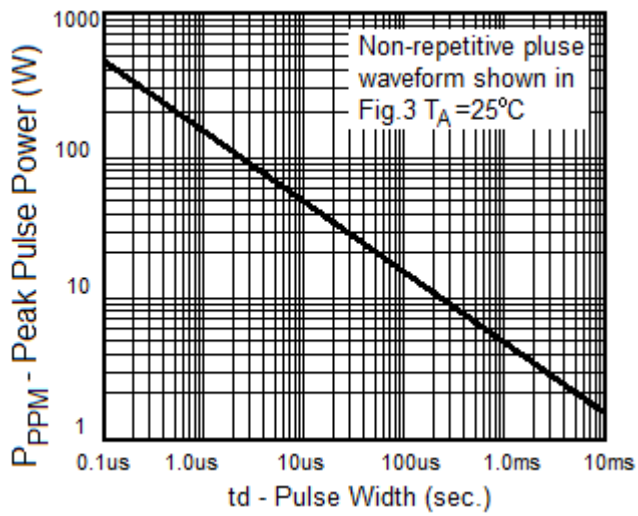
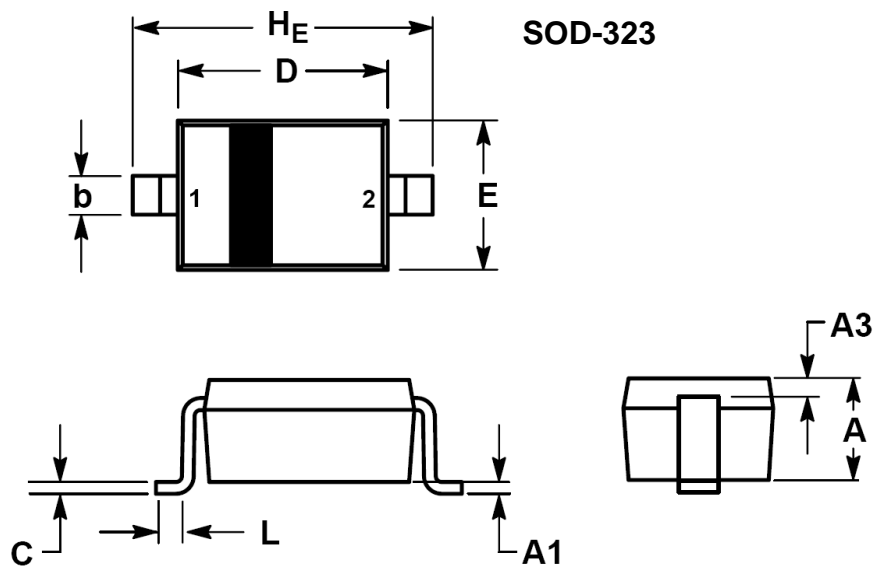


Fig3. Peak Pulse Power vs Pulse Time

Package Dimensions



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		
HE	2.30	2.50	2.70	0.090	0.098	0.106