

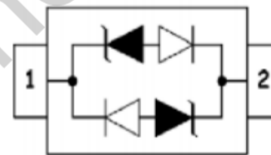
DESCRIPTION

The GBLC05C are ultra low capacitance transient voltage suppressor arrays, designed to protect applications such as portable electronics and SMART phones. This series is available in both unidirectional and bidirectional configurations and is rated at 350 Watts for an 8/20 μ s waveshape.

The GBLC05C meets IEC61000-4-2 (ESD) and IEC 61000-4-4 (EFT) requirements. At higher operating frequencies or faster edge rates insertion loss and signal integrity are a major concern. This series offers a ultra low capacitance and low leakage current in a miniature SOD-323 package.



SOD-323



FEATURES

- ◆ IEC61000-4-2 (ESD) ± 15 kV (air), ± 8 kV (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◆ Protects one I/O line (bidirectional)
- ◆ Low clamping voltage
- ◆ Working voltages: 3V, 5V, 8V, 12V, 15V, 24V
- ◆ Low leakage current
- ◆ Response Time is < 1 ns

MACHANICAL DATA

- ◆ SOD-323 package
- ◆ Flammability Rating: UL94V-0
- ◆ Packaging: Tape and Reel
- ◆ High temperature soldering guaranteed: 260 $^{\circ}$ C/10s
- ◆ Reel size: 7 inch

APPLICATIONS

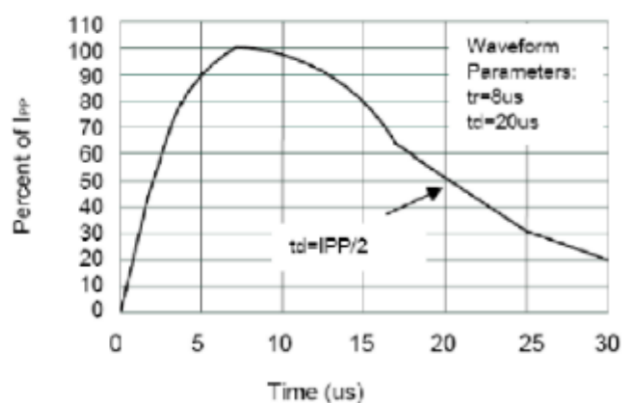
- ◆ Cell Phone Handsets and Accessories
- ◆ Microprocessor based equipment
- ◆ Personal Digital Assistants (PDAs)
- ◆ Notebooks, Desktops, and Servers
- ◆ Portable Instrumentation
- ◆ Peripherals
- ◆ USB Interface

ABSOLUTE MAXIMUM RATING

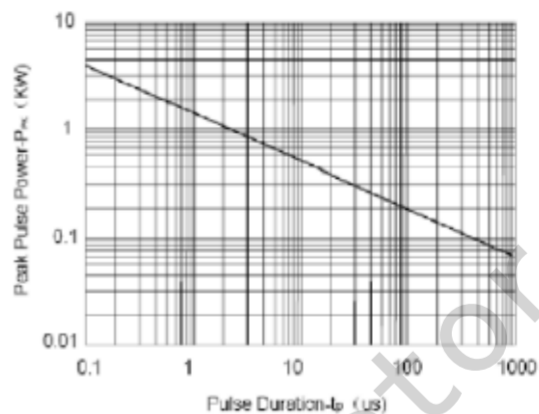
Symbol	Parameter	Value	Units
V _{ESD}	ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	±15 ±8	kV
P _{pp}	Peak Pulse Power (8/20μs)	300	W
T _{OPT}	Operating Temperature	-55/+150	°C
T _{STG}	Storage Temperature	-55/+150	°C
T _L	Lead Soldering Temperature	260	°C

ELECTRICAL CHARACTERISTICS(T_{amb}=25°C)

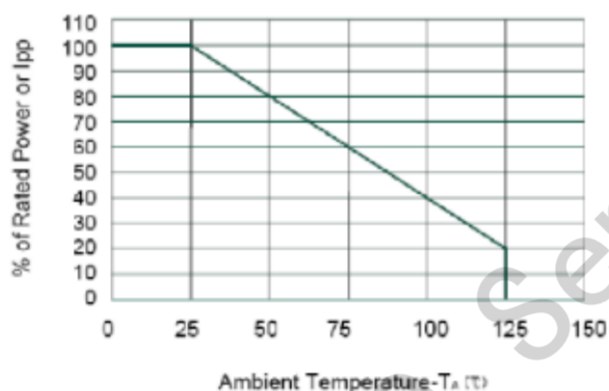
PART NUMBER	V _{RWM} (V) (max)	V _B (V) (min.)	I _T (mA)	V _{C@1A} (V) (max.)	V _C (V) (max.)(@A)		I _R (μA) (max.)	C _T (pF) (typ.)
GBLC03C	3.0	4.0	1	7.0	13.9	8	2	0.8
GBLC05C	5.0	6.0	1	9.8	18.3	8	1	0.8
GBLC08C	8.0	8.5	1	13.4	18.5	8	1	0.8
GBLC12C	12.0	13.3	1	19.0	28.6	6	1	0.8
GBLC15C	15.0	16.7	1	24.0	31.8	5	1	0.8
GBLC24C	24.0	26.7	1	43.0	56.0	3	1	0.8



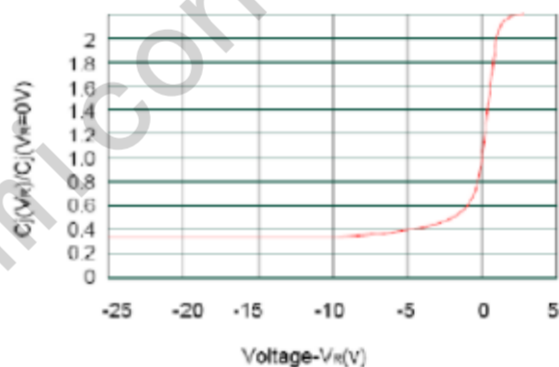
Pulse Waveform



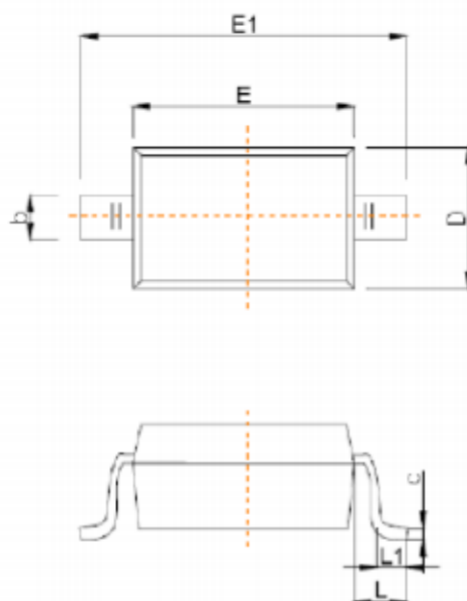
Non-Repetitive Peak Pulse Power vs. Pulse Duration



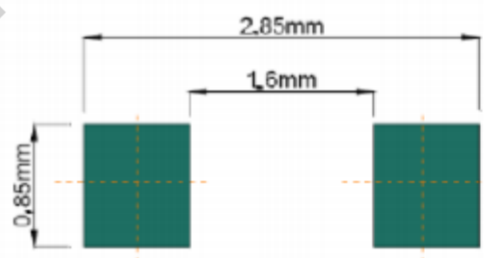
Power Derating Curve



Junction Capacitance vs. Reverse Voltage



Symbol	Dimensions In Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



Recommended Pad outline