

## SMD General Purpose Diode

Primary characteristics		
Parameter	Value	Unit
Working voltage	18	V
ESD per IEC 61000-4-2 (Contact)	±30	kV
ESD per IEC 61000-4-2 (Air)	±30	kV
Peak pulse power (8/20μs)	350	W

### Description

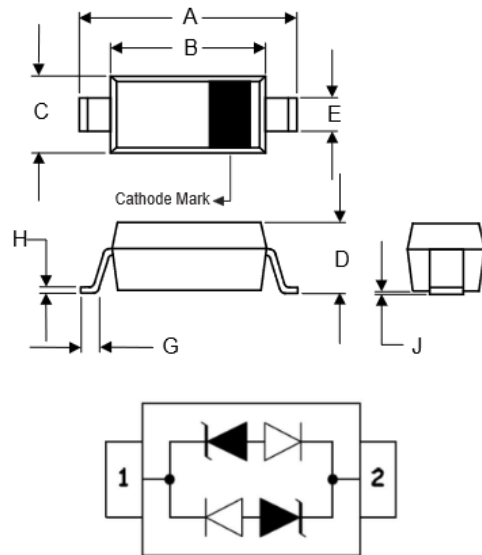
The **GBLC18C** is an ultra-low capacitance transient voltage suppressor arrays designed to protect applications such as portable electronics and SMART phones. This series is available in bidirectional configurations and is rated at 350W for an 8/20μs wave shape.

The **GBLC18C** meets IEC 61000-4-2 (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 ultra-low capacitance and low leakage current in a miniature SOD-323 package.

### Features

- **SOD-323** case for easy automatic insertion.
- Pb-free and **RoHS** compliant
- Protects one I/O line (bidirectional)
- Low clamping voltage
- Low leakage current
- Response time is <1.0ns
- Flammability rating: UL94V-0
- High temperature soldering guaranteed: 260°C/10s

### Case dimensions and PIN configuration



#### SOD-323

Unit	A	B	C	D	E	G	H	J
mm	2.5 ±0.2	1.7 ±0.1	1.25 ±0.10	1.00 -0.2 +0.15	0.3 -0.05 +0.1	0.25 -0.15 +0.2	0.2 -0.1 +0.05	<0.15

### Applications

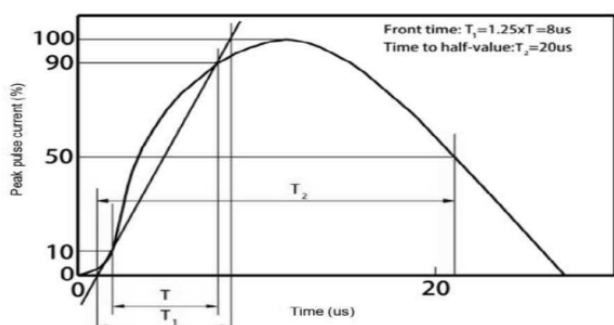
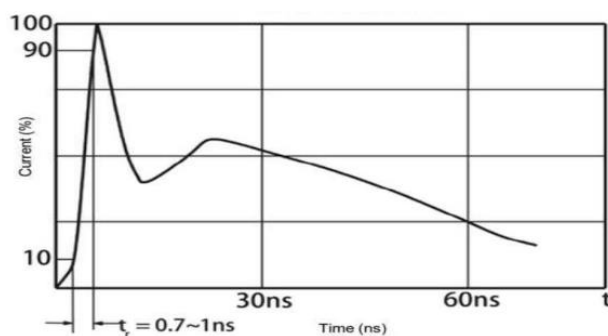
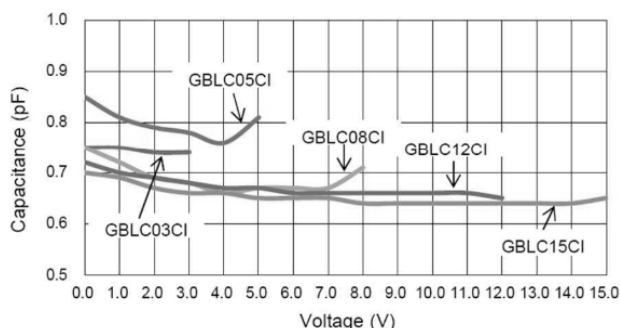
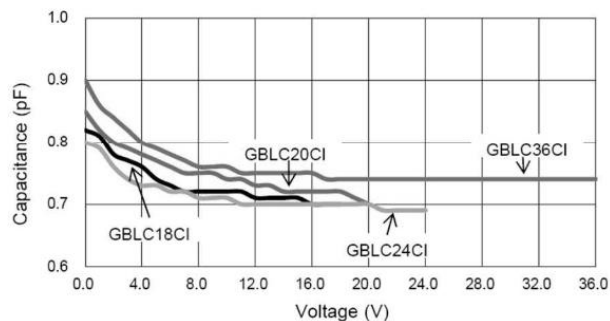
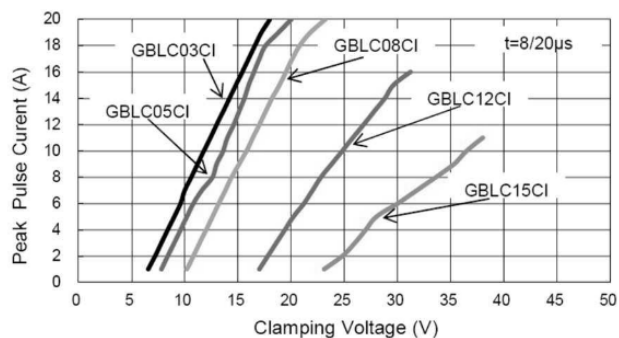
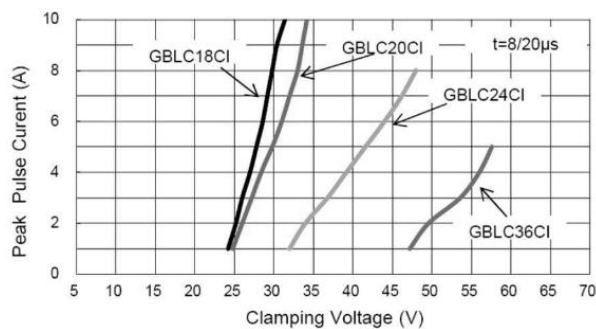
- Cell phone handsets and accessories
- Microprocessor based equipment
- Personal digital assistants (PDA's)
- Notebooks, desktops and servers
- Portable instrumentation
- Peripherals
- USB interface

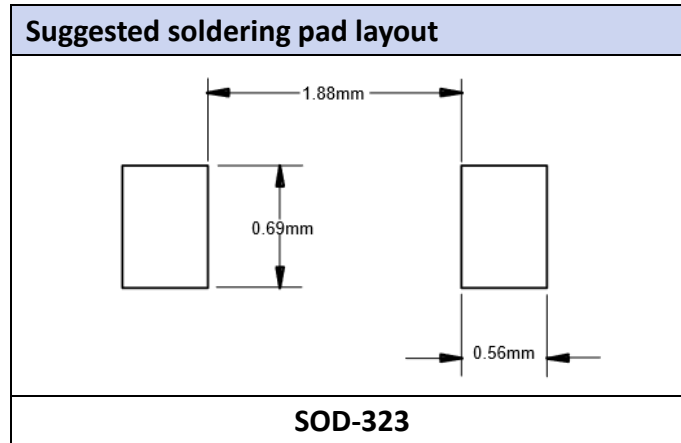
### Absolute maximum ratings (T<sub>a</sub>=25°C)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2	Contact	V <sub>ESD</sub>	±30
	Air		
Peak pulse power (8/20μs)	P <sub>PP</sub>	350	W
Lead soldering temperature	T <sub>L</sub>	260	°C
Storage temperature range	T <sub>STG</sub>	-55 ~ 150	°C
Operating temperature range	T <sub>OPT</sub>	-55 ~ 150	°C

**Electrical characteristics (T<sub>a</sub>=25°C)**

Part number	V <sub>RWM</sub> Max [V]	V <sub>B</sub> Min. @1.0mA [V]	V <sub>C</sub> Max. @1.0A [V]	V <sub>C</sub> Max. @I <sub>pp</sub> =5.0A [V]	V <sub>C</sub> Max. @I <sub>pp</sub> =7.0A [V]	I <sub>R</sub> Max. [μA]	C <sub>T</sub> Typ. [pF]
GBLC18C	18	20	35	45	53	1.0	0.8

**8/20μs waveform per IEC61000-4-5**

**Contact discharge current waveform per IEC 61000-4-2**

**Voltage vs. capacitance**

**Voltage vs. Capacitance**

**Clamping voltage vs. peak pulse current**

**Clamping voltage vs. peak pulse current**




Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
GBLC18C	SOD-323	3000 pcs / 7" reel	---

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