

**DESCRIPTION**

GBLC03_05_08_12_15_18_20_24c are in SOD-323 package.

- IEC61000-4-2(ESD): $\pm 15\text{kV}$ (AIR),
 $\pm 8\text{kV}$ (CONTACT)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 12A (8/20 μs)
- Protects one I/O line (bidirectional)
- Low clamping voltage
- Working voltages : 3V, 5V, 8V, 12V, 15V, 18V & 24V
- Low leakage current
- Response Time is < 1 ns

MECHANICAL DATA

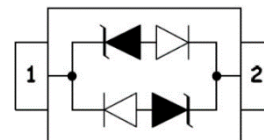
- SOD-323 Package
- Solder Reflow Temperature: 260°C/10s
- Flammability Rating: UL94V-0
- Approx Weight: 5mg

APPLICATIONS

- Ethernet 10/100/1000 Base T
- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Peripherals
- USB Interface

ORDERING INFORMATION

Package Type	Part Number
SOD-323	GBLC03C
	GBLC05C
	GBLC08C
	GBLC12C
	GBLC15C
	GBLC18C
	GBLC20C
	GBLC24C
SPQ	3,000 pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

T_A = 25°C, unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±15	kV
ESD per IEC 61000-4-2 (Contact)		±8	
Peak Pulse Power (8/20μs)	P _{PP}	250	W
Operating Temperature	T _{OPT}	-55/+150	°C
Storage Temperature	T _{STG}	-55/+150	°C
Lead Soldering Temperature	T _L	260	°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A = 25°C unless otherwise noted

Part Number	V _{RWM} (V)	V _{B@1mA} (V)	V _{C@1A} (V)	V _{C@Ipp} (V)		V _{C@Ipp} (V)		I _R (μA) Max	C _T (pF) Typ.
	Max	Min	Max	Max	I _{pp} (A)	Max	I _{pp} (A)		
GBLC03C	3.0	4.0	7.0	13.9	8	20.0	20	5	0.8
GBLC05C	5.0	6.0	9.8	18.3	8	20.0	18	1	0.8
GBLC08C	8.0	8.5	13.4	18.5	8	24.0	18	1	0.8
GBLC12C	12.0	13.3	19.0	24.0	6	28.6	12	1	0.8
GBLC15C	15.0	16.7	24.0	29.0	5	31.8	10	1	0.8
GBLC18C	18.0	20.0	35.0	45.0	5	53.0	7	1	0.8
GBLC20C	20.0	22.0	38.0	45.0	4	55.0	7	1	0.8
GBLC24C	24.0	26.7	43.0	45.0	3	56.0	6	1	0.8



TYPICAL CHARACTERISTICS

Fig 1. Pulse Waveform

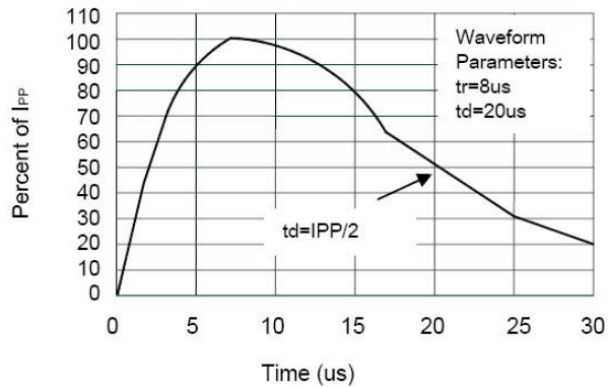


Fig 2. Non-Repetitive Peak Pulse Power vs. Pulse Time

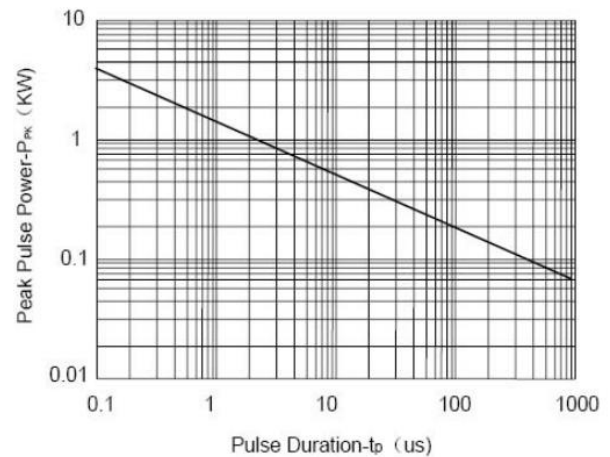


Fig 3. Power Derating Curve

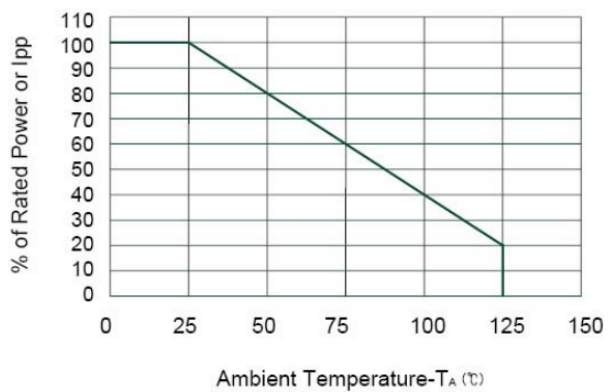
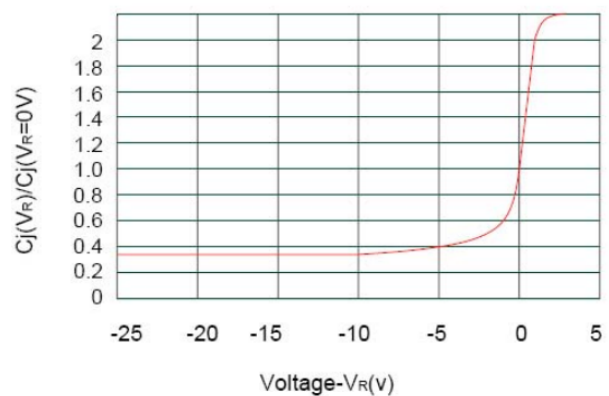


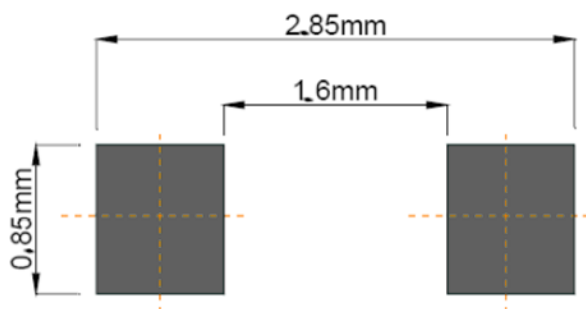
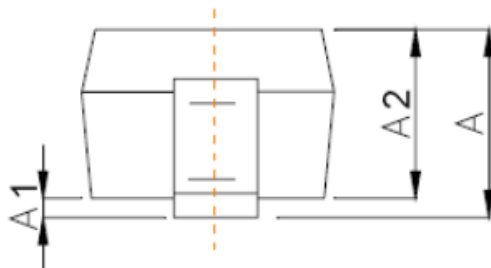
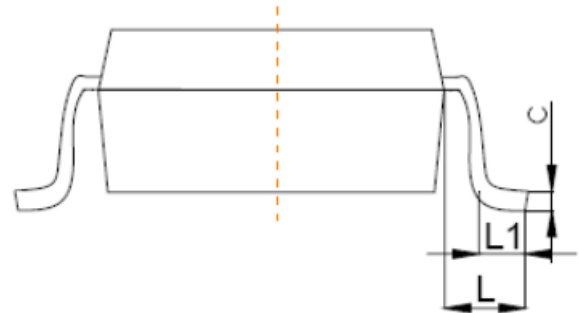
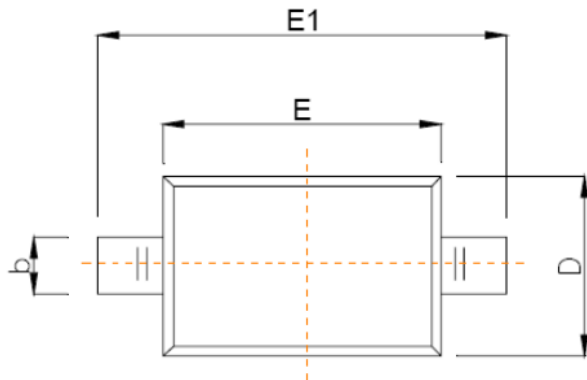
Fig 4. Junction Capacitance vs. Reverse Voltage





PACKAGE INFORMATION

Dimension in SOD-323 (Unit: mm)



RECOMMENDED LAND PATTERN

Symbol	Min	Max
A	-	1.000
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	0.475REF	
L1	0.250	0.400
θ	0°	8°



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