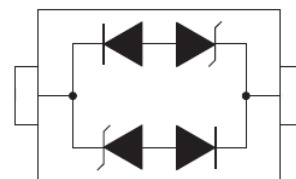


Features

- Unidirectional & bidirectional configurations
- Protects one power or I / O Port
- ESD protection > 40 kV
- Low clamping voltage
- MSL Class 1 compatible
- Available in multiple voltage types ranging from 3V to 24V
- RoHS compliant with Halogen-free

HF



Applications

- Cellular phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB interface

Mechanical Data

- Case: SOD-323
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin-Plated Leads, Solderability-per MIL-STD-202, Method 208



SOD-323

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
GBLC03C	SOD-323	3000 pcs / Tape & Reel	3C
GBLC05C	SOD-323	3000 pcs / Tape & Reel	5C
GBLC08C	SOD-323	3000 pcs / Tape & Reel	8C
GBLC12C	SOD-323	3000 pcs / Tape & Reel	2C
GBLC15C	SOD-323	3000 pcs / Tape & Reel	6C
GBLC18C	SOD-323	3000 pcs / Tape & Reel	1C
GBLC24C	SOD-323	3000 pcs / Tape & Reel	4C

Maximum Ratings (@ T_C = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp = 8 / 20μs)	P _{PP}	350	W
Thermal Resistance Junction-to-Air *1	R _{θJA}	460	°C/W
Thermal Resistance Junction-to-Case *1	R _{θJC}	290	°C/W
Thermal Resistance Junction-to-Lead *1	R _{θJL}	310	°C/W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Note 1: The data tested by surface mounted on a minimum recommended FR-4 board

Electrical Characteristics (@ $T_c = 25^\circ\text{C}$ unless otherwise specified)

Part Number	Rated Stand-off Voltage V_{RWM} (V)	Minimum Breakdown Voltage V_{BR} (V)	@ I_T (mA)	Maximum Clamping Voltage V_C (V)	@ I_{PP} (A)	Maximum Clamping Voltage V_C (V)	@ I_{PP} (A)	Maximum Leakage Current I_R (μA) @ V_{RWM}	Typical Capacitance C_J (pF) @ $V_R = 0\text{V}$, 1MHz
GBLC03C	3.3	4.0	1	7.0	1	19.0	20	0.5	1.0
GBLC05C	5.0	6.0	1	9.8	1	18.3	17	0.5	1.0
GBLC08C	8.0	8.5	1	13.4	1	18.5	15	0.5	1.0
GBLC12C	12.0	13.3	1	19.0	1	28.6	11	0.5	1.0
GBLC15C	15.0	16.7	1	24.0	1	31.8	10	0.5	1.0
GBLC18C	18.0	20.0	1	29.0	1	45.0	8	0.5	1.0
GBLC24C	24.0	26.7	1	43.0	1	56.0	6	0.5	1.0

Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

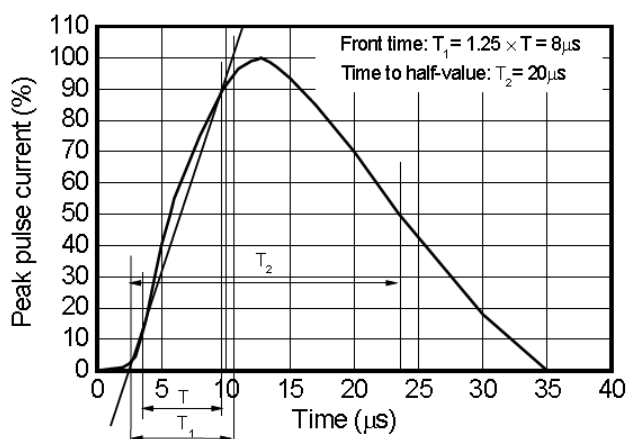


Fig1. 8/20 μs waveform per IEC61000-4-5

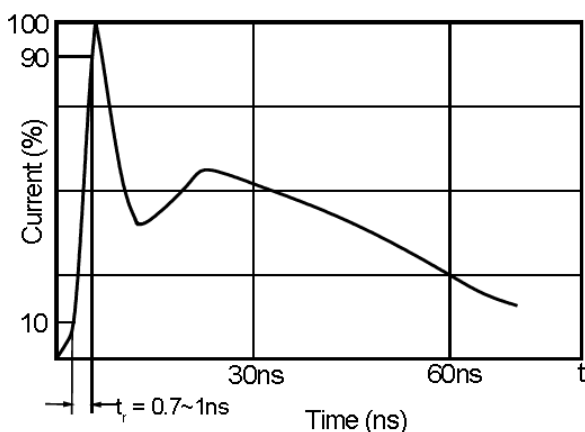
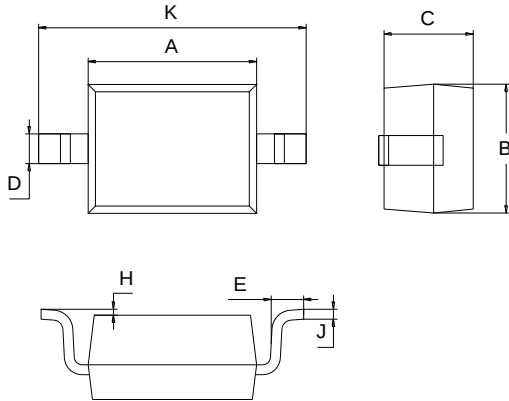


Fig2. ESD pulse waveform according to IEC61000-4-2

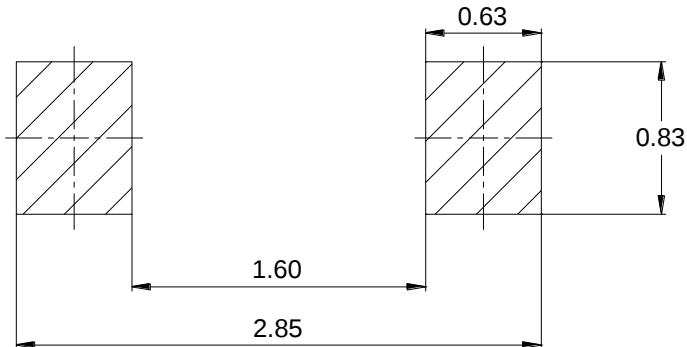
Package Outline Dimensions (Unit: mm)



SOD-323		
Dimension	Min.	Max.
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (Unit: mm)

SOD-323



IMPORTANT NOTICE

Changzhou Galaxy Century Microelectronics (GME) reserves the right to make changes without further notice to any product information (copyrighted) herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.