

Features

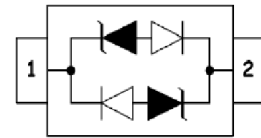
- Low leakage Current
- Protects one power or I/O line
- Low clamping voltage
- Response Time is <1 nS
- Transient protection for data lines to:
 IEC61000-4-2 (ESD) $\pm 15\text{KV}(\text{air})$, $\pm 8\text{KV}(\text{contact})$;
 IEC61000-4-4 (EFT) 40A (5/50ns)



SOD-323

Applications

- Cell Phone Handsets and Accessories
- Microprocessor Based Equipment
- Notebooks, Desktops and Servers
- Portable Instrumentation, Peripherals
- PDAs
- USB Interface



Schematic Diagram

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Max.	Unit
ESD Rating per IEC61000-4-2 (Air)	V_{ESD}	± 15	kV
ESD Rating per IEC61000-4-2 (Contact)		± 8	
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PP}	350	W
Operating Temperature	T_{OPT}	-55 to +150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$
Lead Soldering Temperature	T_L	260	$^\circ\text{C}$

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

Part Number	V_{RWM} (V) Max.	V_B (V) Min.	I_T (mA)	$V_C @ 1\text{A}$ (V) Max.	V_C (V)		I_R (μA) Max.	C_T (pF) typ.
					Max	@A		
GSLC03B006	3.0	4.0	1	7.0	13.9	17.0	5	0.6
GSLC05B006	5.0	6.0	1	9.8	18.3	17.0	2	0.6
GSLC08B006	8.0	8.5	1	13.4	18.5	17.0	1	0.6
GSLC12B006	12.0	13.3	1	19.0	28.6	11.0	1	0.6
GSLC15B006	15.0	16.7	1	24.0	31.8	10.0	1	0.6
GSLC18B006	18.0	20.0	1	29.0	45.0	8.0	1	0.6
GSLC24B006	24.0	26.7	1	43.0	56.0	6.0	1	0.6

Typical Electrical and Thermal Characteristic Curves

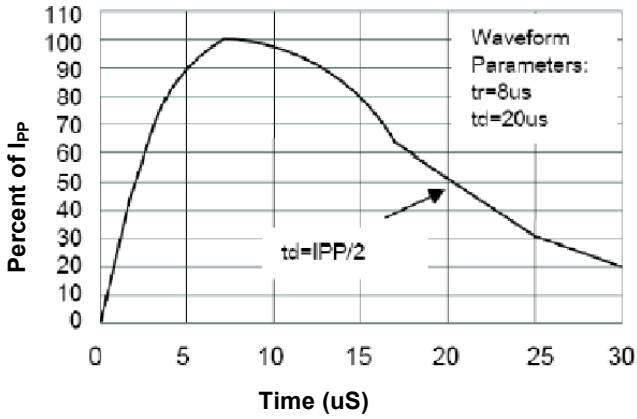


Figure 1. Pulse Waveform

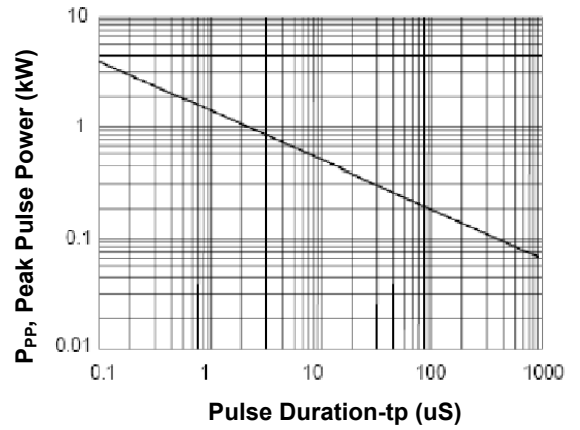


Figure 2. Non-Repetitive Peak Pulse Power vs. Pulse Duration

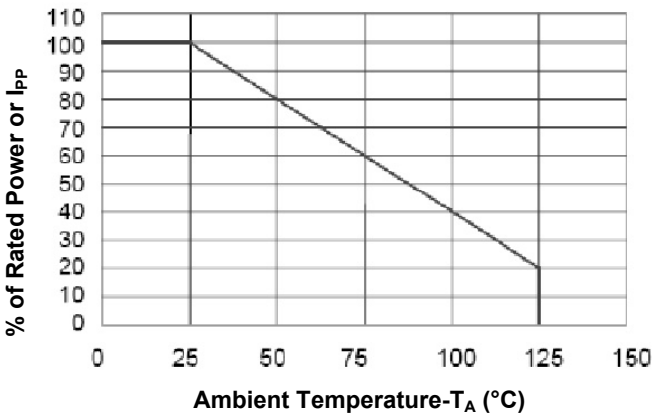


Figure 3. Power Derating Curve

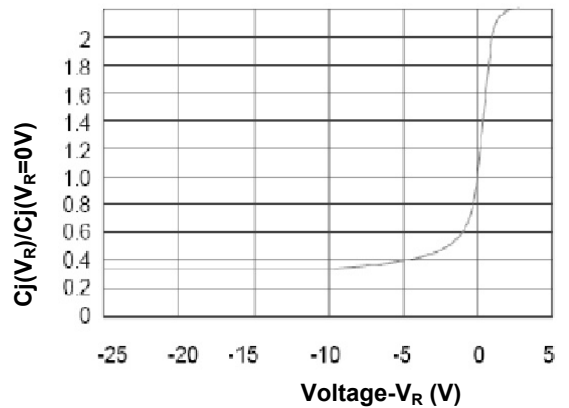
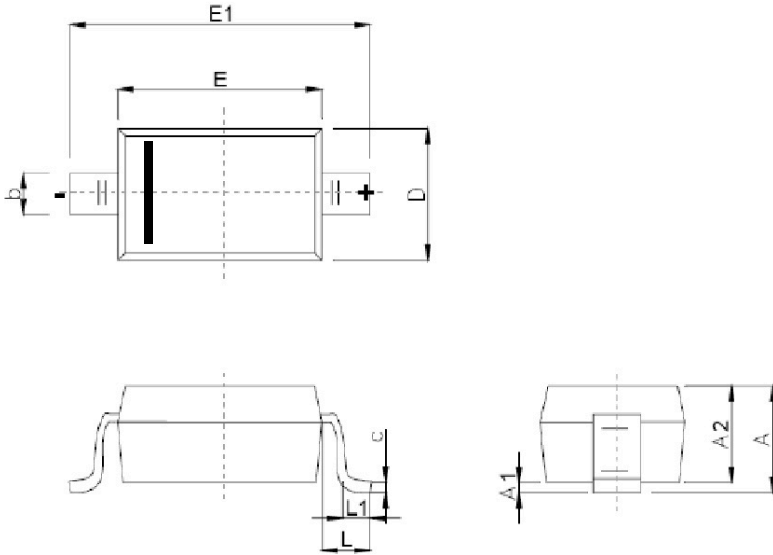


Figure 4. Junction Capacitance vs. Reverse Voltage

GSLCxxB006

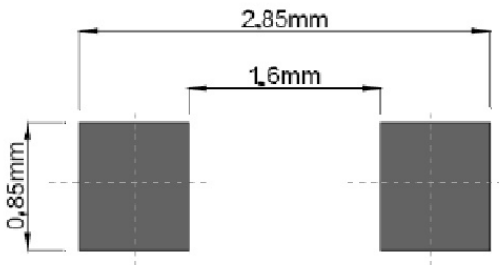
Ultra-Low Capacitance ESD Protection Diode

Package Outline Dimensions (SOD-323)



Symbol	Dimensions In Millimeters	
	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	0.475 REF	
L1	0.250	0.400
θ	0°	8°

Recommended Pad Layout



Order Information

MPN	Package	Marking	Quantity	HSF Status
GSLC03B006	SOD-323	CC	3000pcs / Reel	RoHS Compliant
GSLC05B006	SOD-323	AC	3000pcs / Reel	RoHS Compliant
GSLC08B006	SOD-323	BC	3000pcs / Reel	RoHS Compliant
GSLC12B006	SOD-323	DC	3000pcs / Reel	RoHS Compliant
GSLC15B006	SOD-323	EC	3000pcs / Reel	RoHS Compliant
GSLC18B006	SOD-323	FC	3000pcs / Reel	RoHS Compliant
GSLC24B006	SOD-323	HC	3000pcs / Reel	RoHS Compliant