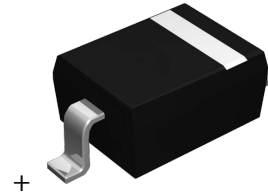


GSESLC18VD323S-2B

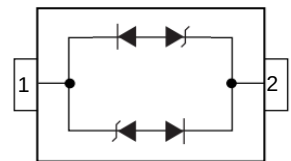
Low Capacitance ESD Protection Diode

Features

- 240W peak pulse power per line ($t_p=8/20\mu s$)
- SOD-323 package
- Bidirectional configurations
- Protects one power or I/O line
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to
IEC61000-4-2 (ESD) $\pm 30KV$ (air), $\pm 30KV$ (contact);
IEC61000-4-4 (EFT) 40A (5/50ns)
IEC61000-4-5 (surge): 5.5A (8/20us)



SOD-323



Schematic Diagram

Applications

- Ethernet- 10/100/1000 Base T
- Cellular phones
- Handheld- Wireless Systems
- PDAs
- USB Interface

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	240	W
Operating Temperature Range	T_J	-55 To +125	$^\circ C$
Storage Temperature Range	T_{STG}	-55 To +150	$^\circ C$

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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	18	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	19.8	-	-	V
Reverse Leakage Current	I_R	$V_{RWN}=18V$	-	-	1	μA
Clamping Voltage (Pin 2 to Pin 1)	V_C	$I_{PP}=5.5A$, $T_P=8/20\mu s$	-	38	-	V
Junction Capacitance	C_J	$V_R=0V$, $f=1MHz$	-	1	-	pF

Typical Characteristic Curves

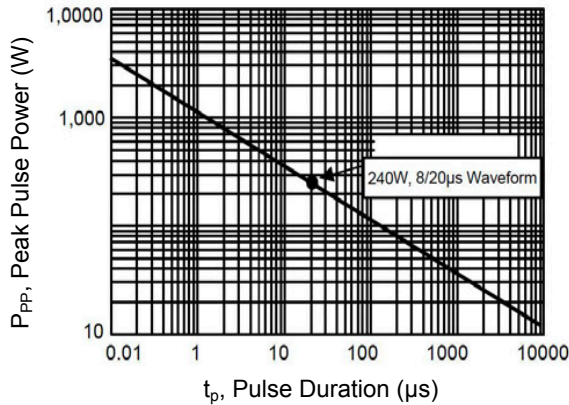


Figure 1. Peak Pulse Power vs. Pulse Time

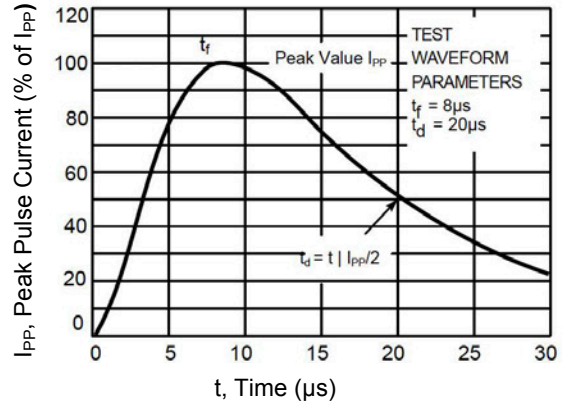


Figure 2. Pulse Waveform - 8/20 μs

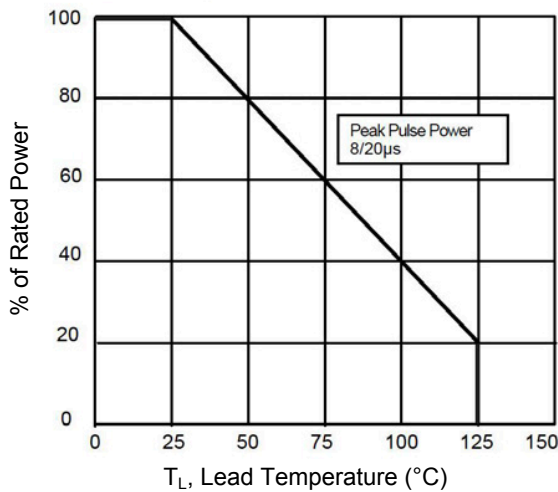


Figure 3. Power Derating Curve

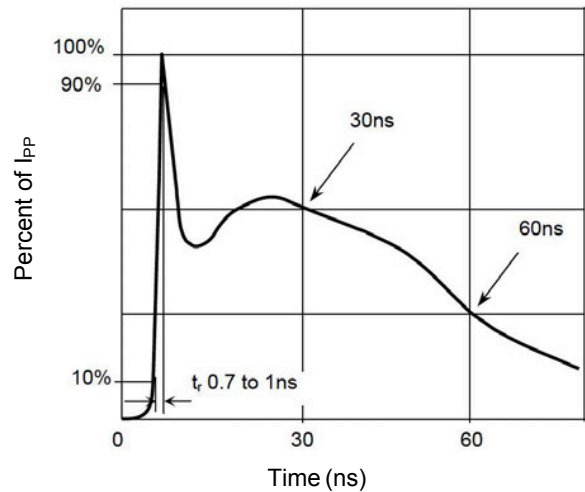
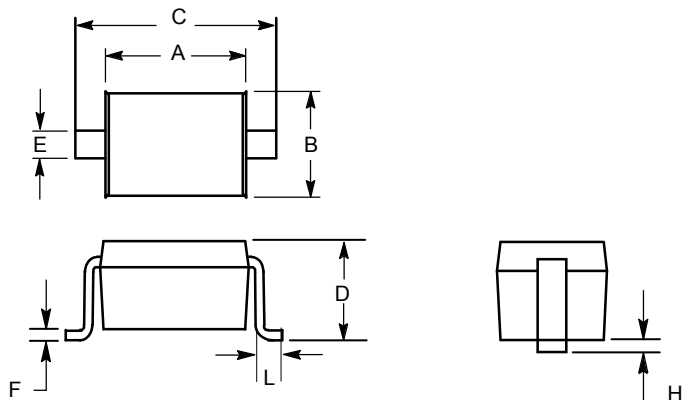


Figure 4. Pulse Waveform - ESD (IEC61000-4-2)

GSESLC18VD323S-2B

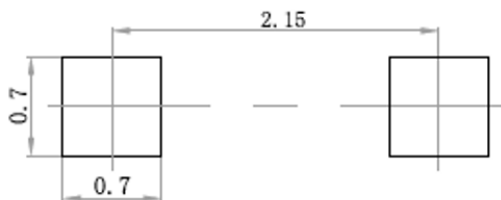
Low Capacitance ESD Protection Diode

Package Outline Dimensions (SOD-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.600	1.900	0.063	0.075
B	1.150	1.450	0.045	0.057
C	2.390	2.700	0.094	0.106
D	0.800	1.100	0.031	0.043
E	0.250	0.400	0.010	0.016
F	0.100	0.200	0.004	0.008
H	-	0.100	-	0.004
L	0.200	-	0.008	-

Recommended Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Order Information

Device	Package	Marking	Quantity	HSF Status
GSESLC18VD323S-2B	SOD-323	TBL	3,000pcs / Reel	RoHS Compliant