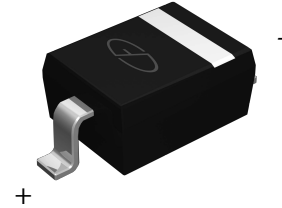


GSESLC12VD323-2U

Low Capacitance ESD Protection Diode

Features

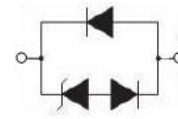
- Low capacitance: 2pF
- Low reverse stand-off voltage: 12V
- Low reverse clamping voltage
- Low leakage current
- Fast response time
- JESD22-A114-B ESD Rating of class 3B per human body model
- IEC 61000-4-2 Level 4 ESD protection



SOD-323

Applications

- High speed data lines
- Handheld-Wireless Systems
- Ethernet – 10/100/1000 Base
- USB Interface



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Limit	Unit
IEC 61000-4-2 ESD Voltage	Air Model	±25	kV
	Contact Model	±25	
JESD22-A114-B ESD Voltage	Per Human Body Model	±16	
ESD Voltage	Machine Model	±0.4	
Peak Pulse Power	P _{PP} ²	352	W
Peak Pulse Current	I _{PP} ²	11	A
Lead Solder Temperature – Maximum (10 Second Duration)	T _L	260	°C
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

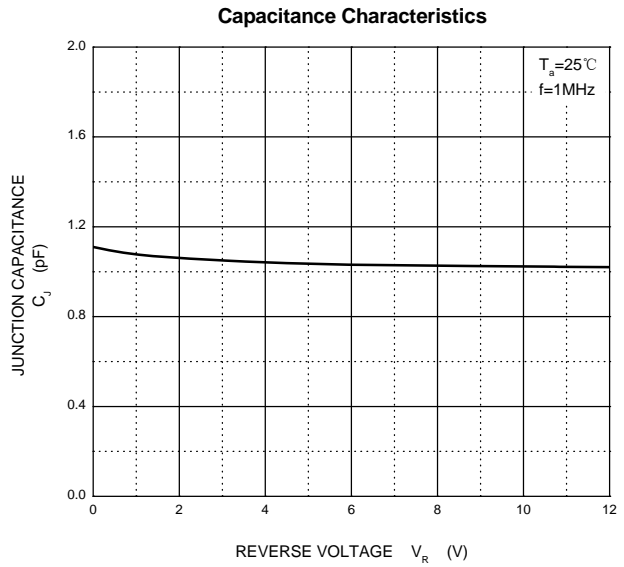
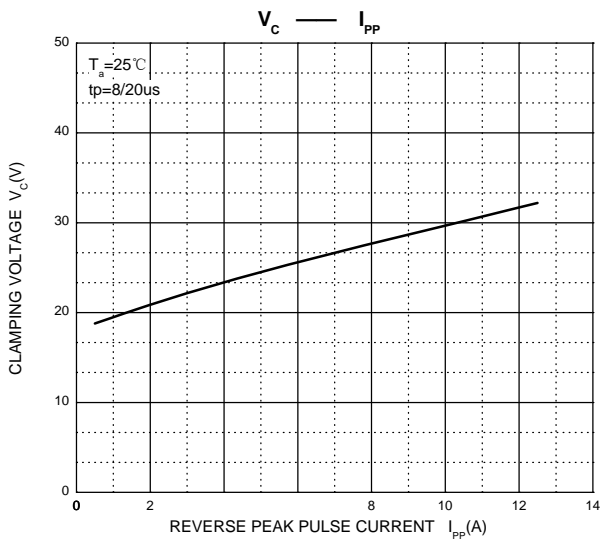
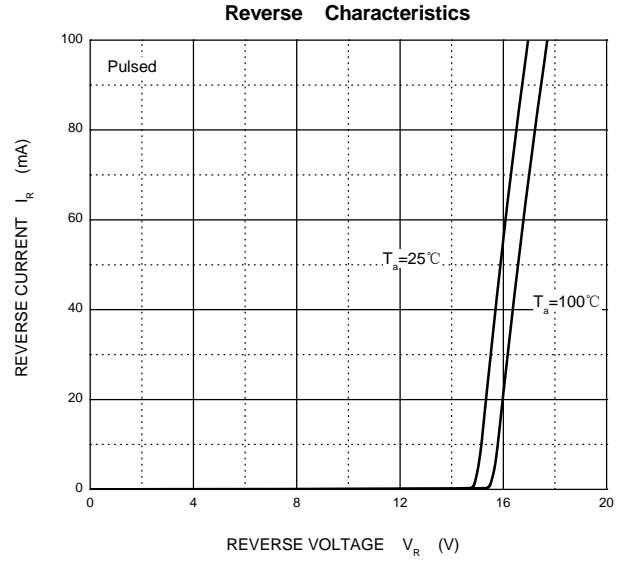
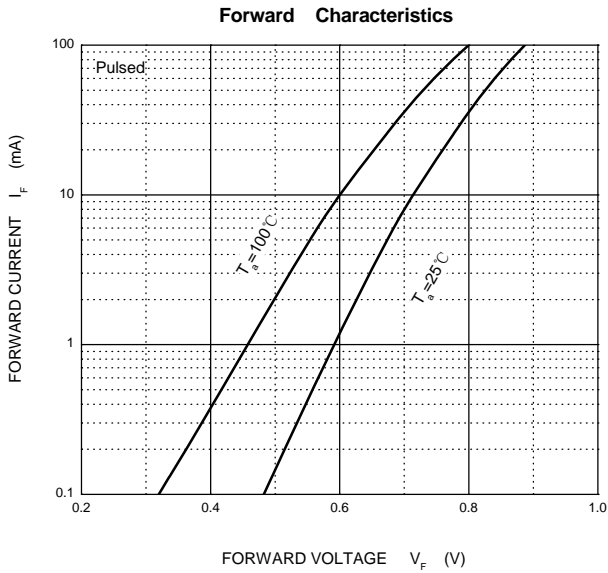
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Reverse Stand Off Voltage	V _{RWM}		-	12	V
Reverse Leakage Current	I _R	V _{RWM} =12V	-	0.5	μA
Breakdown Voltage	V _(BR)	I _T =1mA	13.6	16	V
Clamping Voltage	V _C ²	I _{PP} =11A	-	32	V
Junction Capacitance	C _J	V _R =0V,f=1MHz	-	2	pF

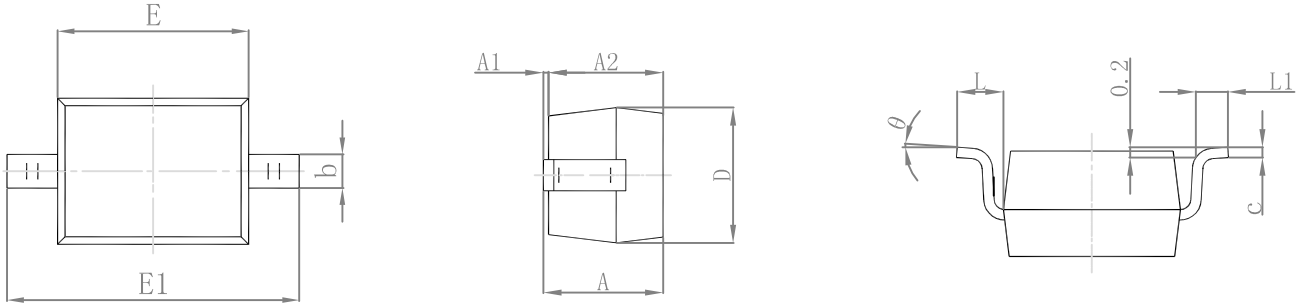
Notes:

- 1.Device stressed with ten non-repetitive ESD pulses.
- 2.Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5.

Typical Characteristic Curves

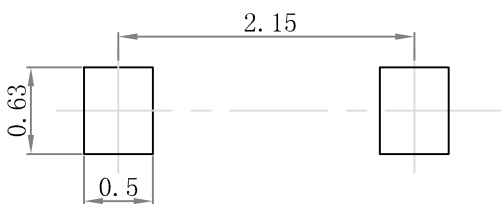


Package Outline Dimensions SOD-323



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.700	0.098	0.106
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



- Note:**
1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05mm.
 3. The pad layout is for reference purposes only.

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSESLC12VD323-2U	SOD-323	V12	Tape & Reel	3000pcs / Reel	RoHS compliant