

GSE050SB1D3F

ESD Protection Diode

Product Description

It is designed to protect sensitive electronics from damage due to electrostatic discharge (ESD) and other transient events.

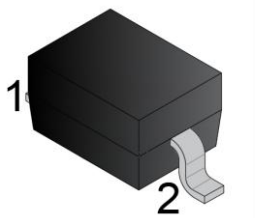
Features

- Peak Reverse Working Voltage: 5V
- IEC61000-4-2(ESD) $\pm 30\text{KV}$ (Air)
- IEC61000-4-2(ESD) $\pm 30\text{KV}$ (Contact)
- IEC61000-4-4 (EFT) 40A (5/50ns).
- IEC61000-4-5 (Lightning) 8A (8/20 μs).

Mechanical Data

- SOD-323. Package
- RoHS Compliant and Halogen Free

Package and Pin Assignment

SOD-323	Equivalent Circuit
	

Ordering and Marking Information

GS P/N	Package	Marking	Quantity / Reel
GSE050SB1D3F	SOD-323	5B 	3,000 PCS
GSE050SB1D3F - Product Code: GSE050SB1 - Package Code: D3 for SOD-323 - Green Level: F for RoHS Compliant and Halogen Free			
Marking Information			
 - Product Code: 5B 			

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

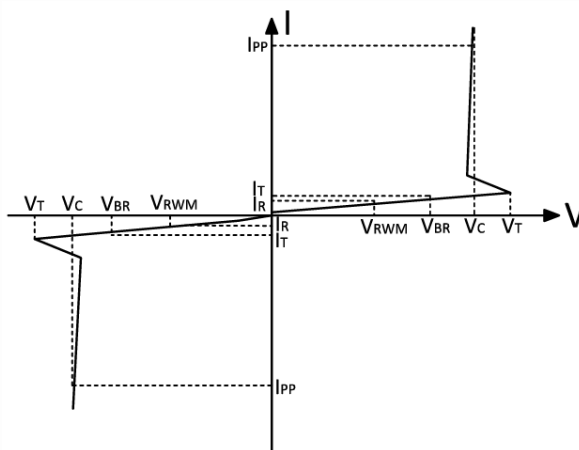
Symbol	Parameter	Value	Unit
P _{PP}	Peak Pulse Power (t _p =8/20μs)	232	W
I _{PP}	Peak Pulse Current (t _p =8/20μs)	8	A
V _{ESD}	ESD Per IEC61000-4-2 (Air)	±30	KV
	ESD Per IEC61000-4-2 (Contact)	±30	KV
T _J	Operating Junction Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

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

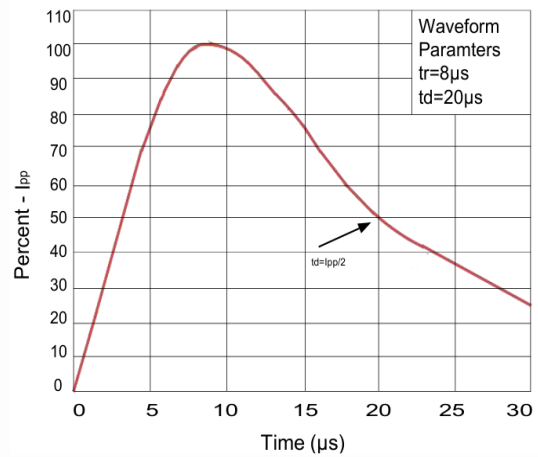
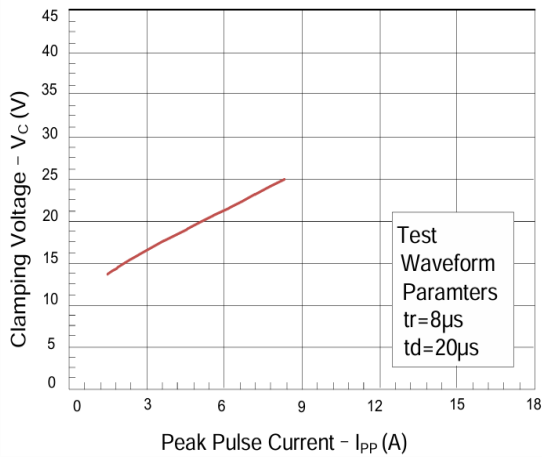
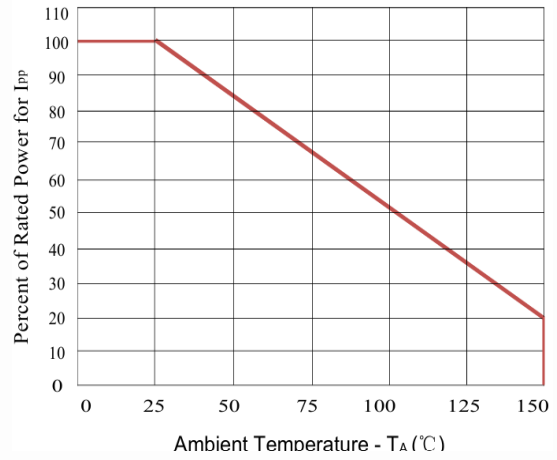
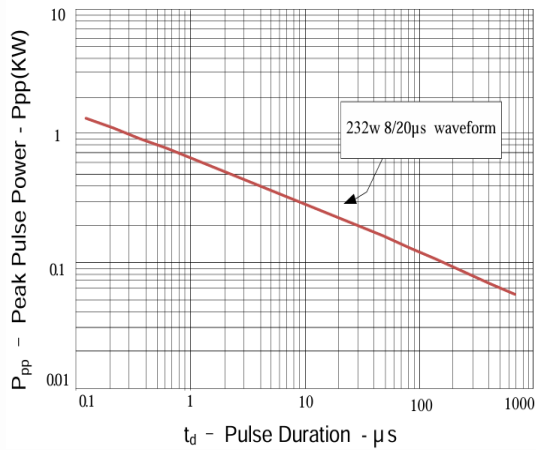
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V _{RWM}	Reverse Working Voltage	-			5	V
V _{BR}	Breakdown Voltage	I _T = 1mA	6		9.5	V
I _R	Reverse Leakage Current	V _{RWM} =5V		0.1	0.5	μA
V _C	Clamping Voltage	I _{PP} =8A (8/20μs)		25	29	V
C _J	Junction Capacitance	V _R =0V, f=1MHz		0.3	0.5	pF

Electrical Parameters

Symbol	Parameter
I _{PP}	Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Peak Reverse Working Voltage
I _R	Reverse Leakage Current @ V _{RWM}
V _{BR}	Breakdown Voltage @ I _T
V _T	Test Voltage
I _T	Test Current

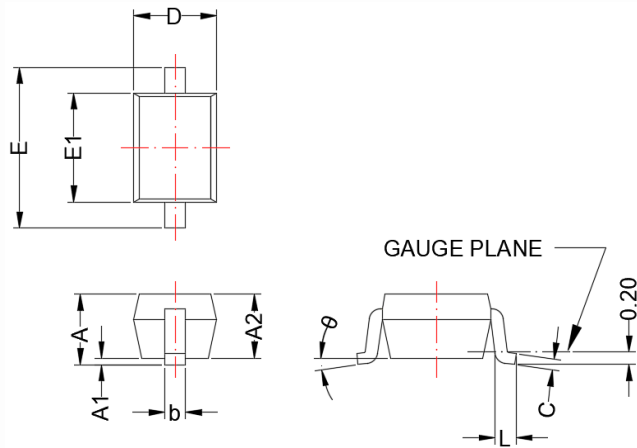


Typical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

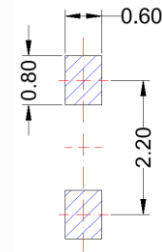


SOD-323

Package Dimension



Recommended Land Pattern



Unit:mm

Dimensions				
Symbol	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	---	1.10	---	0.043
A1	0.00	0.10	0.000	0.004
A2	0.80	---	0.031	---
b	0.25	0.40	0.010	0.016
c	0.08	0.25	0.003	0.010
D	1.10	1.40	0.043	0.055
E	2.30	2.80	0.091	0.110
E1	1.40	1.80	0.055	0.071
L	0.08	0.40	0.003	0.016
θ	0°	8°	0°	8°

NOTE:

Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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