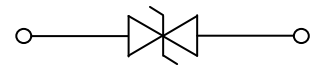
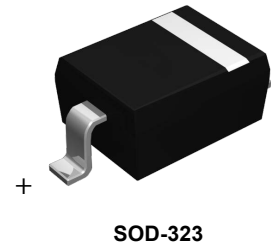


GSEDC5B250 ESD Protection Diode

Features

- 350W peak pulse power ($t_p = 8/20\mu s$)
- SOD-323 package
- Fast response time, typically $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 15\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 8\text{kV}$ (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- RoHS compliant



Schematic Diagram

Applications

- Laptop computers
- Cellular phones
- Digital cameras
- PDAs

Absolute Maximum Ratings

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

Rating	Symbols	Value	Unit
Peak Pulse Power ($T_P = 8/20\mu s$)	P_{PP}	350	W
Peak Pulse Current ($T_P = 8/20\mu s$)	I_{PP}	13.5	A
Operating Temperature	T_J	-55 to +150	$^\circ\text{C}$
Storage temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics

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

Parameter	Symbols	Conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	V_{RWM}		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	6	-	7.8	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $T_P = 8/20\mu s$	-	-	9.8	V
Clamping Voltage	V_C	$I_{PP} = 9.8\text{A}$, $T_P = 8/20\mu s$	-	17	-	V
Clamping Voltage	V_C	$I_{PP} = 13.5\text{A}$, $T_P = 8/20\mu s$	-	25	-	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	-	25	-	pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power vs Pulse Time

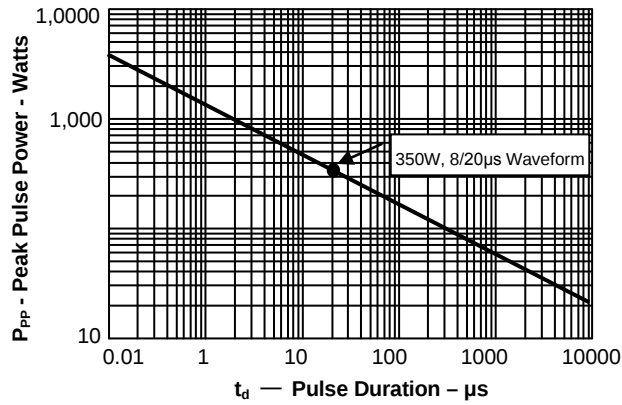


Fig.2 Pulse WaveForm-8/20 μs

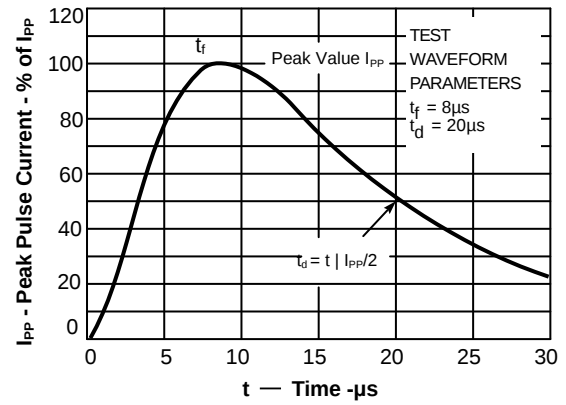


Fig.3 Power Derating Curve

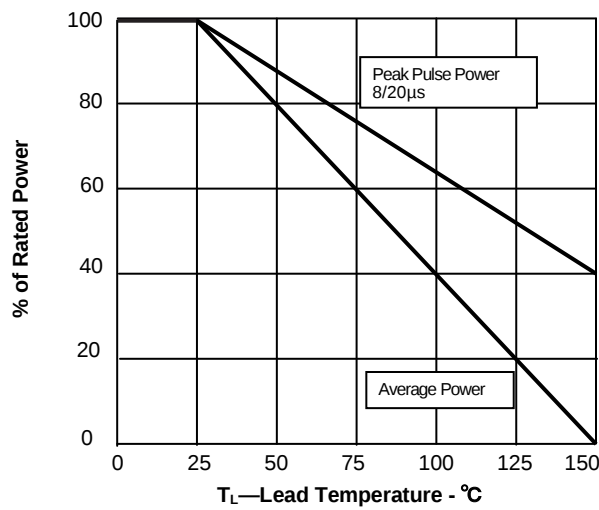
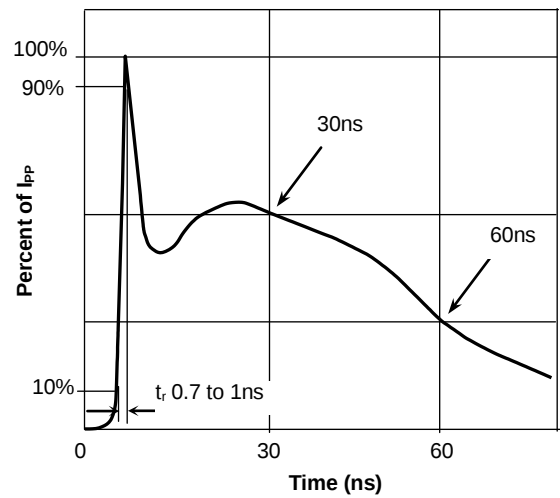


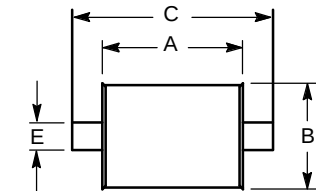
Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



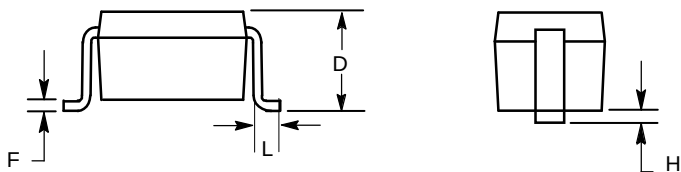
GSEDC5B250
ESD Protection Diode

Product Dimensions

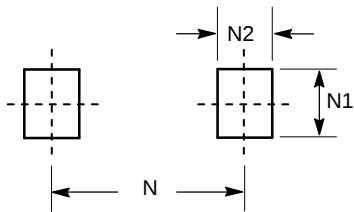
SOD-323



Dim	millimeters	
	min	max
A	1.60	1.90
B	1.15	1.45
C	2.39	2.70
D	0.80	1.10
E	0.25	0.40
F	0.10	0.20
H		0.10
L	0.20	-

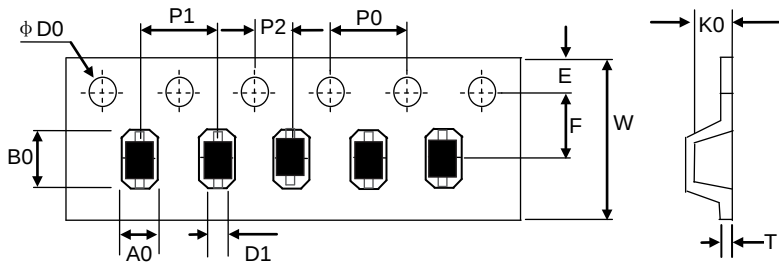


PAD Dimensions



Dim	millimeters
N1	0.80
N2	0.80
N	3.00

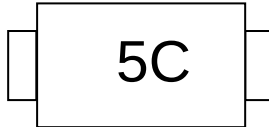
Package Information



Unit:mm

A0	B0	K0	D1	φ D0	E	F	W	P0	P1	P2	T
1.52±0.10	2.90±0.10	1.35±0.10	1.0±0.25	1.50±0.10	1.75± 0.10	3.50± 0.05	8.00± 0.10	4.00±0.10	4.00±0.10	2.00±0.05	0.24~0.27

Marking



Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
GSEDC5B250	SOD-323	0.0045g	Tape & Reel	3000pcs	RoHS compliant