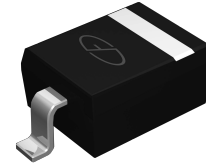


Features

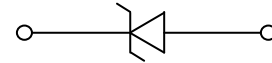
- 1400W peak pulse power (tp= 8/20μs)
- SOD-323 package
- Fast response time, typically < 1 ns
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV (Air) ESD protection
- IEC 61000-4-2 ±30kV (Contact) ESD protection
- IEC 61000-4-5 110A (8/20us) SURGE protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- RoHS compliant



SOD-323

Applications

- USB Vbus
- Power Line
- Power Management



Schematic Diagram

Absolute Maximum Ratings

(T_A=25°C unless otherwise specified)

Rating	Symbols	Value	Units
Peak Pulse Power (T _P =8/20μS)	P _{PP}	1400	W
Peak Pulse Current (T _P =8/20μS)	I _{PP}	110	A
Operating Temperature	T _J	-55 to +150	°C
Storage temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics

(T_A=25°C unless otherwise specified)

Parameter	Symbols	Conditions	Min	Typ	Max	Units
Reverse stand-off voltage	V _{RWM}		-	-	4.5	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	5.0	6.2	6.5	V
Reverse Leakage Current	I _R	V _R =4.5V	-	-	1.0	μA
Clamping Voltage ⁽¹⁾	V _C	V _{EOS} =220V, I _{PP} =90A	-	12	-	V
Clamping Voltage ⁽¹⁾	V _C	V _{EOS} =250V, I _{PP} =110A	-	12.8	-	V
Junction Capacitance	C _J	V _R =0V, f=1MHz	-	560	-	pF

Note1: IEC61000-4-5

Typical Characteristic Curves

Fig.1 Peak Pulse Power vs Pulse Time

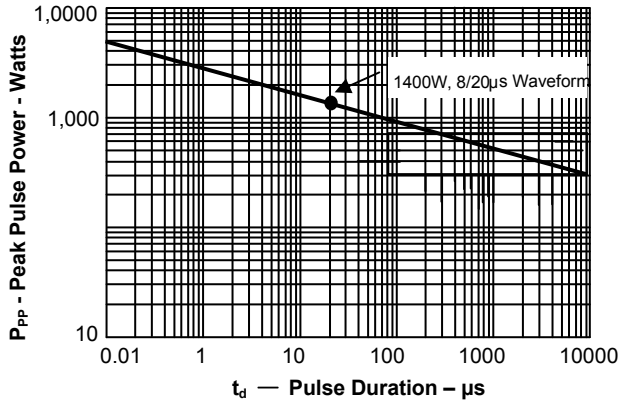


Fig.2 Pulse WaveForm-8/20μs

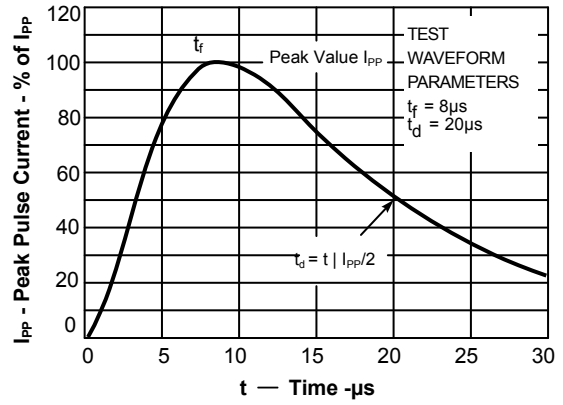


Fig.3 Power Derating Curve

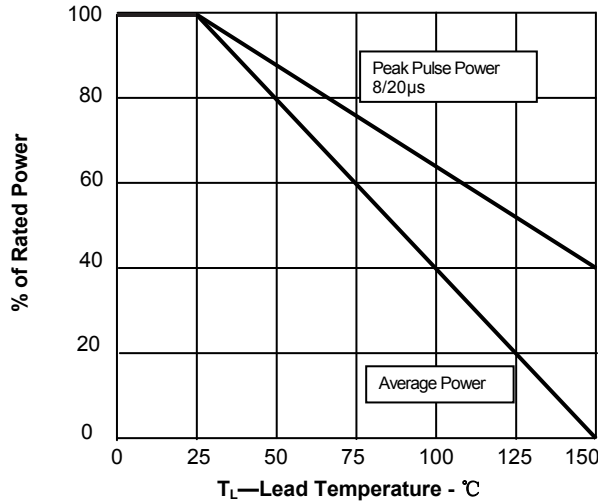
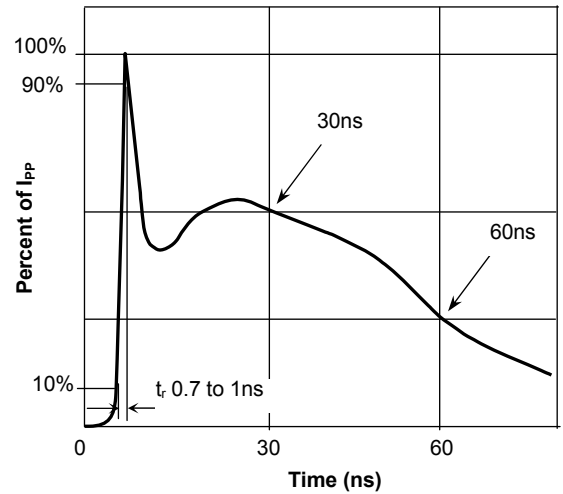
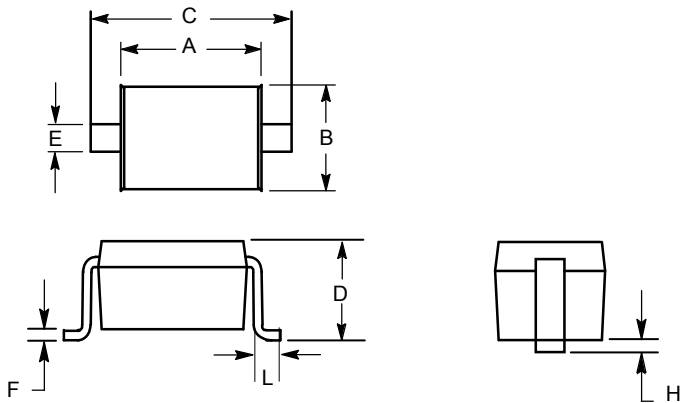


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

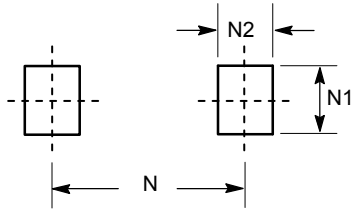


Product Dimensions



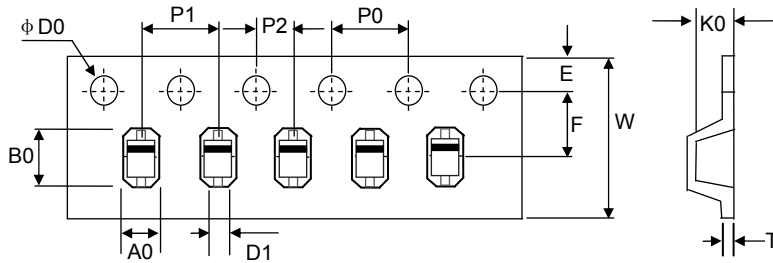
Dim	millimeters	
	min	max
A	1.60	1.90
B	1.15	1.45
C	2.39	2.70
D	0.80	1.10
E	0.25	0.40
F	0.10	0.20
H		0.10
L	0.20	-

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	3.00± 0.10	4.00±0.10	4.00±0.10	2.00±0.05	0.24~0.27

Marking



Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSESHC4V5D323-2U	SOD-323	4D	Tape & Reel	3000pcs	RoHS compliant