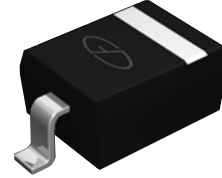


Features

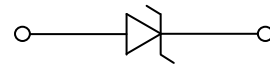
- 360W peak pulse power ($t_p = 8/20\mu s$)
- Fast response time, typically $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 30\text{kV}$ (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection



SOD-323

Applications

- Laptop computers
- Cellular phones
- Digital cameras
- PDAs



Schematic Diagram

Absolute Maximum Ratings

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

Rating	Symbols	Value	Units
Peak Pulse Power ($T_P = 8/20\mu s$)	P_{PP}	360	W
Peak Pulse Current ($T_P = 8/20\mu s$)	I_{PP}	20	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	Units
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	$I_{PP} = 20\text{A}$, $T_P = 8/20\mu s$	-	17	19	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	-	200	-	pF

Typical Characteristic Curves

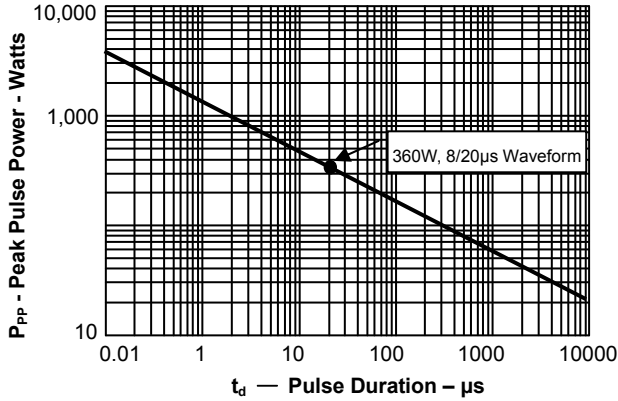


Fig.1 Peak Pulse Power vs Pulse Time

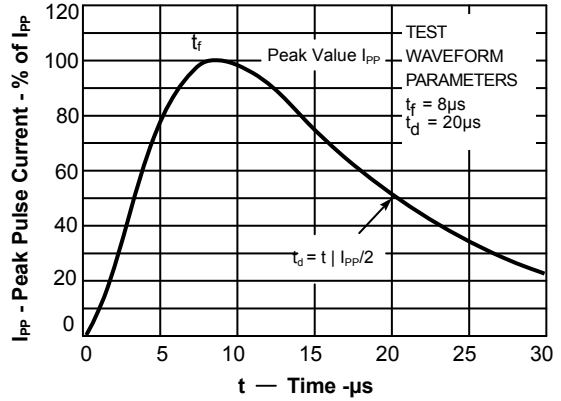


Fig.2 Pulse WaveForm-8/20μs

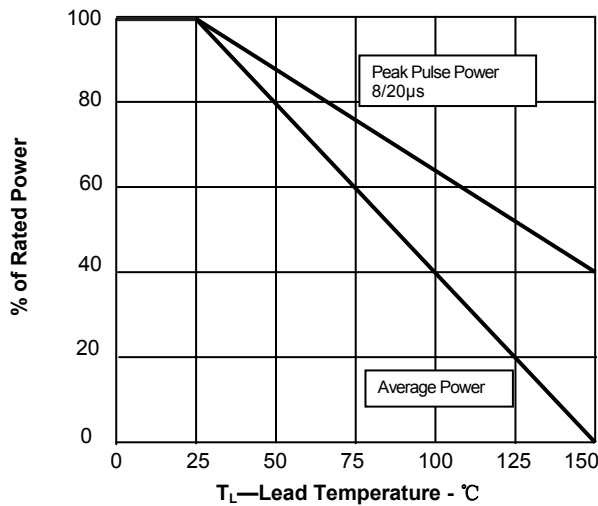


Fig.3 Power Derating Curve

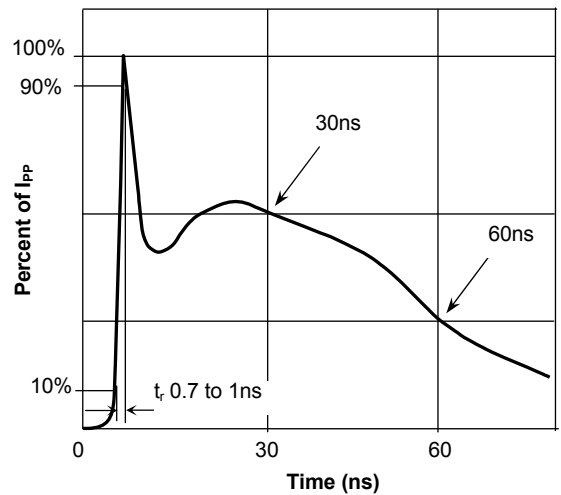
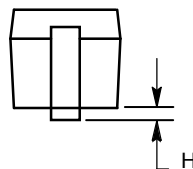
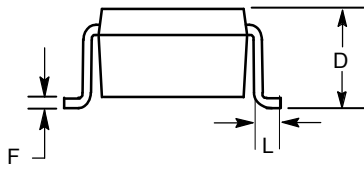
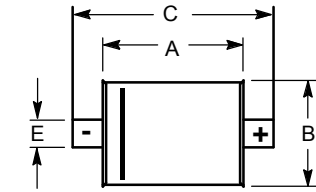


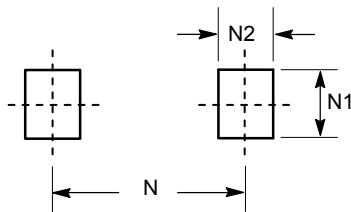
Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

Package Outline 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
FF	0.10	0.20
H	-	0.10
L	0.20	-

Recommended Pad Layout



Dim	millimeters
N1	0.80
N2	0.80
N	3.00

Order Information

MPN	Package	Marking	Quantity	HSF Status
GSEDC5U2000	SOD-323	05W	3000pcs / Reel	RoHS Compliant