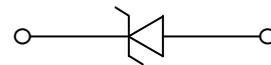


Features

- 580 Watts peak pulse power ($t_p=8/20\ \mu\text{S}$)
- Unidirectional configuration
- 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
- RoHS compliant



SOD-323



Schematic Diagram

Applications

- Laptop Computers
- Cellular Phones
- Digital Cameras
- PDAs



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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\ \mu\text{S}$)	P_{PP}	580	W
Peak Pulse Current ($T_P=8/20\ \mu\text{S}$)	I_{PP}	27	A
Junction Temperature	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameterer	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	4	-	-	V
Reverse Leakage Current	I_R	$V_{RWM}=3.3\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A}, T_P=8/20\ \mu\text{S}$	-	-	6.5	V
Clamping Voltage	V_C	$I_{PP}=27\text{A}, T_P=8/20\ \mu\text{S}$	-	19	21	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	200	-	pF

Typical Characteristic Curves

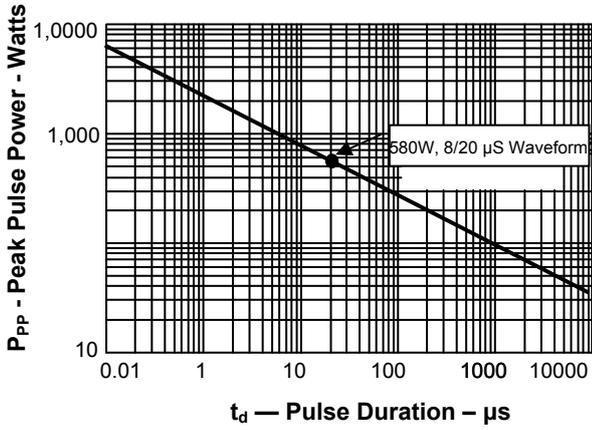


Figure 1. Peak Pulse Power vs Rating Curve

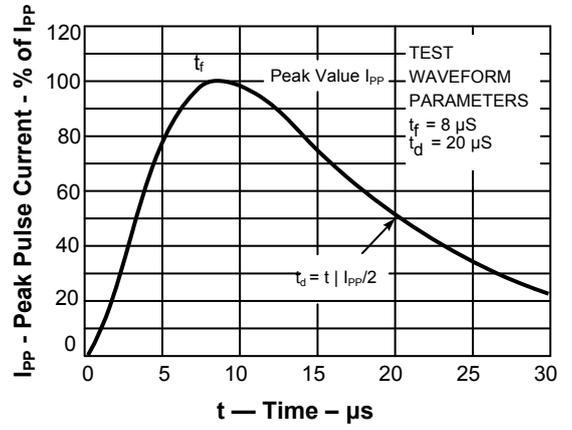


Figure 2. Pulse WaveForm-8/20µs

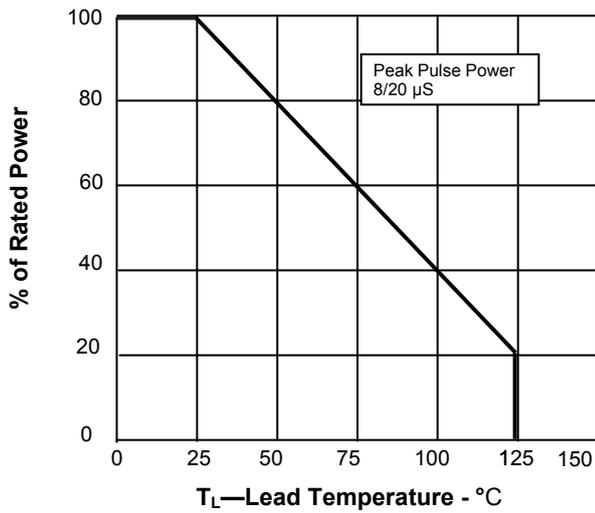


Figure 3. Power Derating Curve

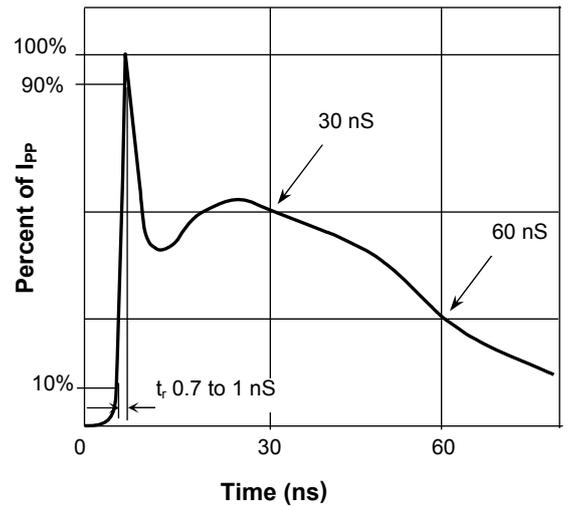
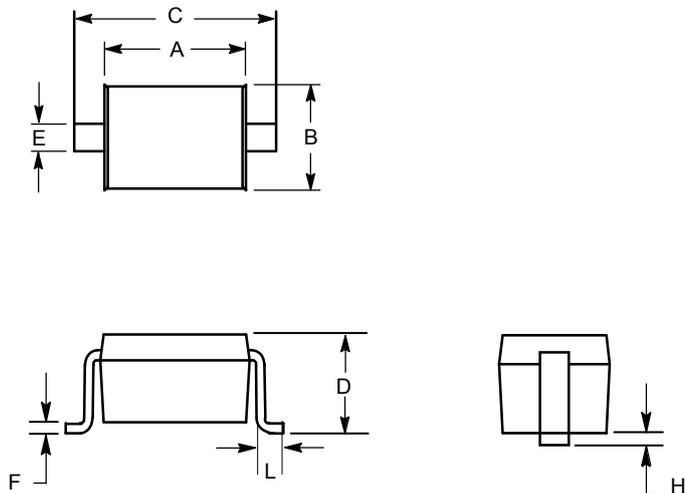


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

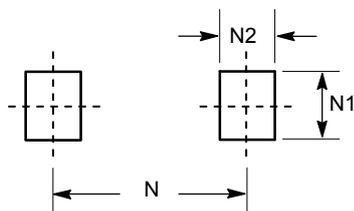
Package Outline Dimensions

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
F	0.10	0.20
H	-	0.10
L	0.20	-

Suggested Pad Layout



Dim	Millimeters
N1	0.80
N2	0.80
N	3.00

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status	Net Weight
GSEDC3U2000	SOD-323	03	Tape & Reel	3000pcs/Reel	RoHS compliant	0.0045g