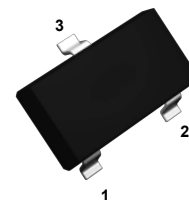
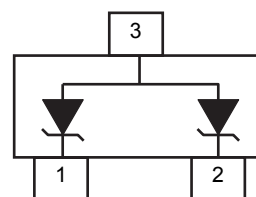


Features

- 350 Watts peak pulse power ($t_P = 8/20\mu s$)
- Protects one bidirectional or two unidirectional lines
- 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 61000-4-5 25A (8/20 μs) Lightning protection



SOT-23



Schematic Diagram

Applications

- Cellular Handsets and Accessories
- Portable Electronics
- Control & Monitoring Systems
- Servers, Notebooks, and Desktop PCs
- Set-Top Box
- Communication Systems

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

Parameter	Symbol	Max.	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}	25	A
Operating 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)

Parameter	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	5	-	V
Reverse Leakage Current	I_R	$V_{RWM} = 3.3\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP} = 25\text{A}$, $T_P = 8/20\mu s$	-	-	14	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	-	200	-	pF

Typical Characteristic Curves

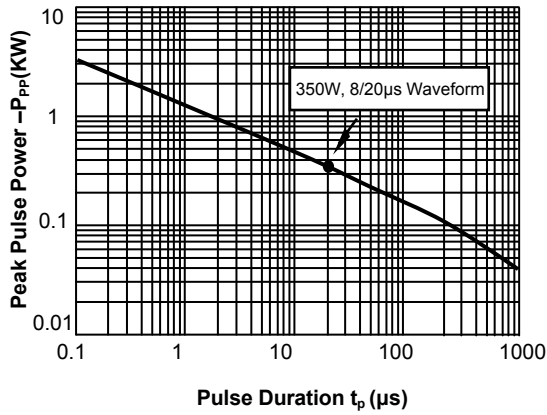


Figure 1. Peak Pulse Power Rating Curve

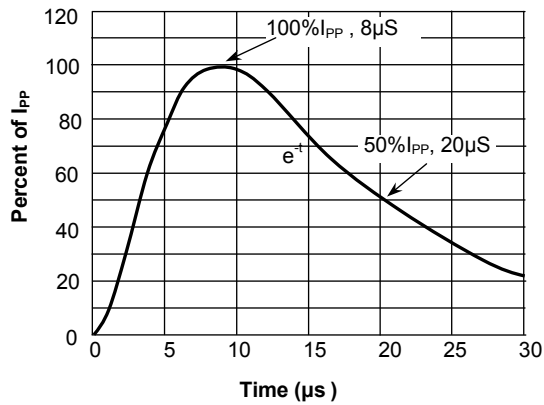


Figure 3. Pulse Waveform-8/20 μs

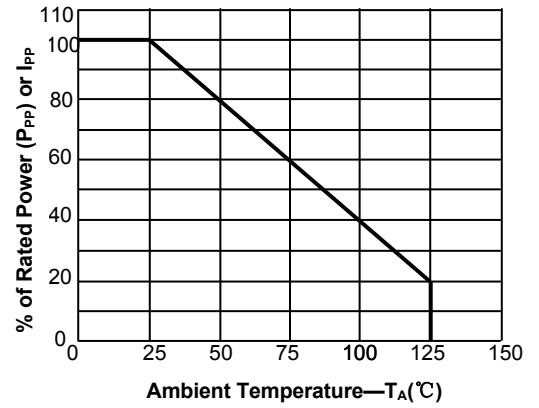


Figure 2. Pulse Derating Curve

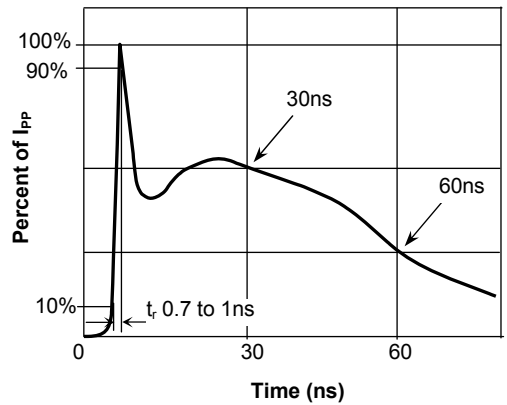
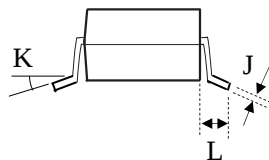
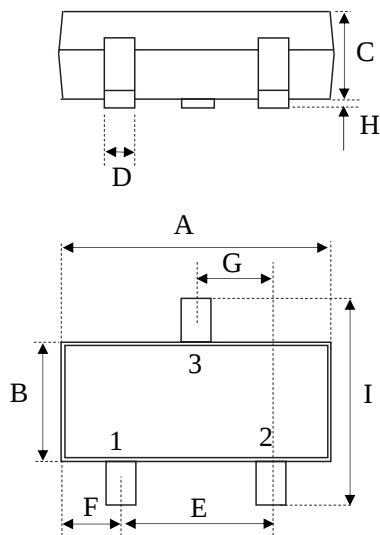


Figure 4. Pulse Waveform-ESD(IEC61000-4-2)

GSEC3U2000 ESD Protection Diode

Product Dimensions



SOT-23

Dim	millimeters	
	min	max
A	2.80	3.04
B	1.20	1.40
C	0.89	1.11
D	0.37	0.50
E	1.78	2.04
F	0.45	0.60
G	0.89	1.02
H	0.013	0.100
I	2.10	2.50
J	0.085	0.177
K	0°	10°
L	0.45	0.60

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEC3U2000	SOT-23	3M2	Tape & Reel	3000pcs	RoHS compliant