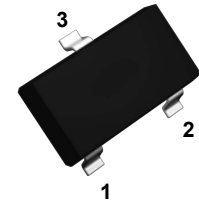
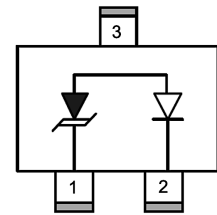


Features

- 374 watts peak pulse power ($t_p=8/20\mu s$)
- SOT-23 package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 22A (8/20 μs)



SOT-23



Schematic Diagram

Applications

- Dataline
- Automatic teller machines
- Net works
- Power line

Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	374	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	22	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	kV
Lead Soldering Temperature	T_L	260 (10 seconds)	$^{\circ}C$
Junction Temperature Range	T_J	-55 to +125	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 to +150	$^{\circ}C$

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0	-	-	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^{\circ}C$	-	0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$	-	-	22	A
Clamping Voltage	V_C	$I_{PP}=22A, t_p=8/20\mu s$	-	-	17	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	0.5	-	pF

Typical Performance Characteristics

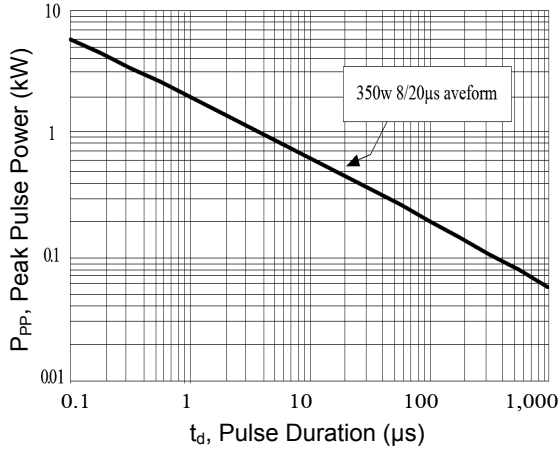


Figure 1. Peak Pulse Power vs. Pulse Time

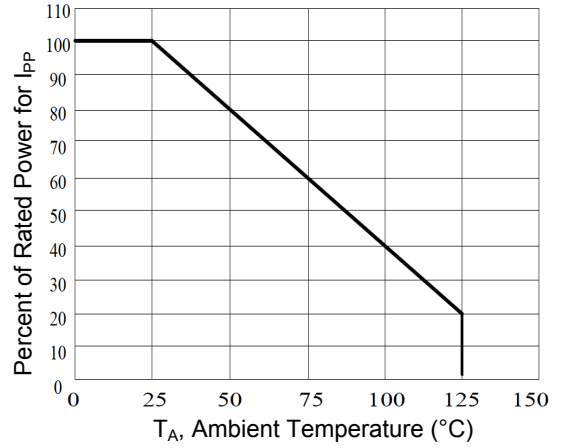


Figure 2. Power Derating Curve

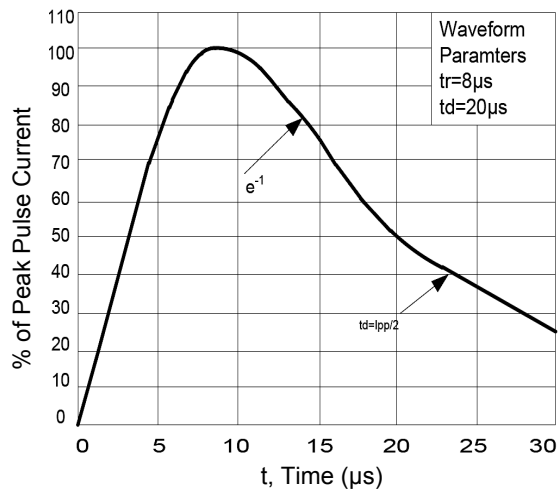


Figure 3. Pulse Waveform

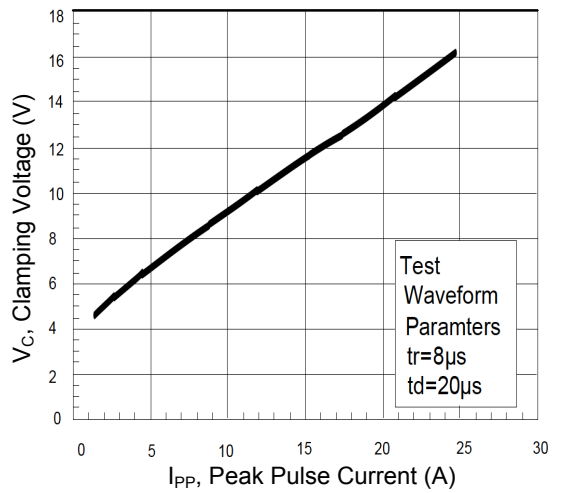
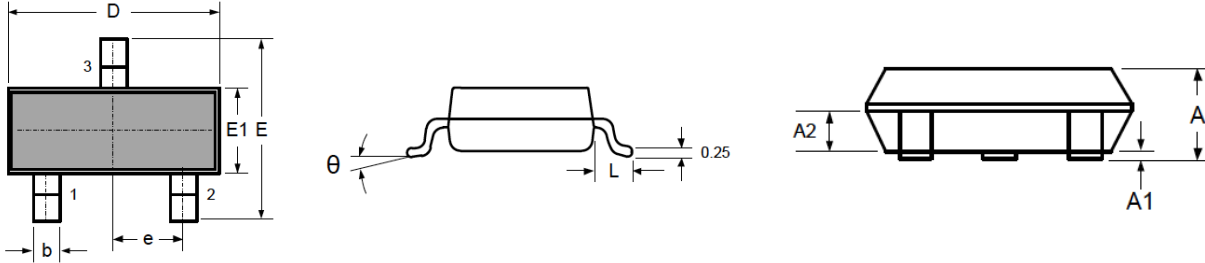


Figure 4. Clamping Voltage vs. I_{PP}

Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Order Information

Device	Package	Marking	Packaging	SPQ
GSEC5U005	SOT-23	L05	Tape & Reel	3,000 Pcs / Reel