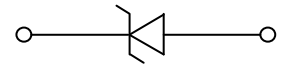


Features

- 60 Watts peak pulse power per line ($T_P = 8/20\mu s$)
- SOD-923 package
- Unidirectional configuration
- Response time is typically $< 1ns$
- Protects one I/O or power line
- Low clamping voltage
- Transient protection for data lines to
 IEC 61000-4-2 $\pm 8KV$, contact $\pm 15KV$ air;
 IEC 61000-4-4 (EFT) 40A (5/50ns)



SOD-923



Schematic Diagram

Applications

- Portable instrumentation
- Digital Cameras
- Peripherals

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	60	W
Lead Soldering Temperature	T_L	260 (10 sec)	$^\circ C$
Operating Temperature	T_J	-55 to +150	$^\circ C$
Storage Temperature	T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Working Voltage	V_{RWM}	-	-	-	3.3	V
Breakdown Voltage	V_{BR}	$I_T=1mA$	5.0	6.0	7.0	V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V$	-	-	1.0	μA
Forward Voltage	V_F	$I_F=10mA$	-	0.8	-	V
Clamping Voltage	V_C	$I_{PP}=1A, T_P=8/20\mu s$	-	7.0	7.5	V
		$I_{PP}=7A, T_P=8/20\mu s$	-	9.0	9.5	V
Junction Capacitance	C_J	$V_R=0V, F=1MHz$	-	37	50	pF

Typical Characteristic Curves

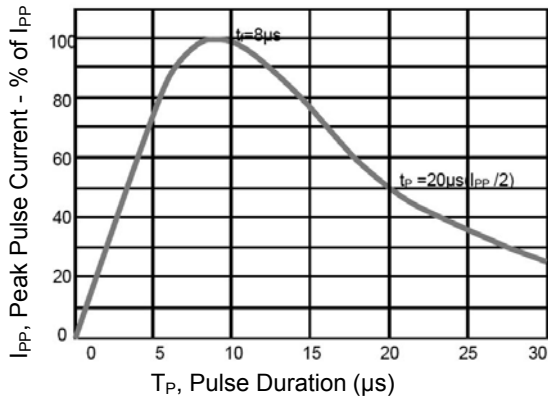


Figure 1. Pulse Waveform

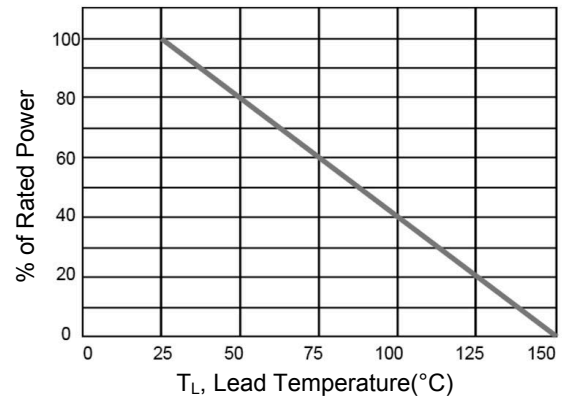


Figure 2. Power Derating Curve

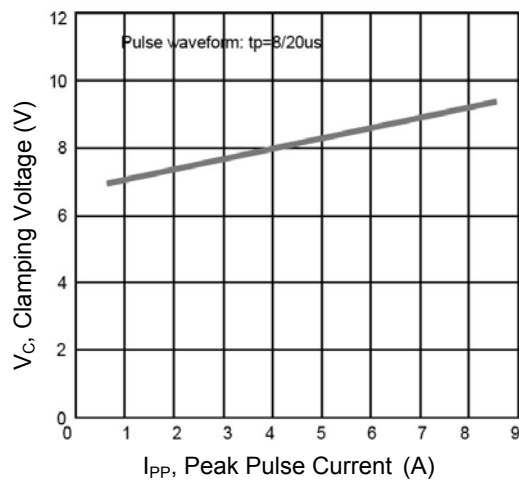


Figure 3. Clamping Voltage vs. Peak Pulse Current

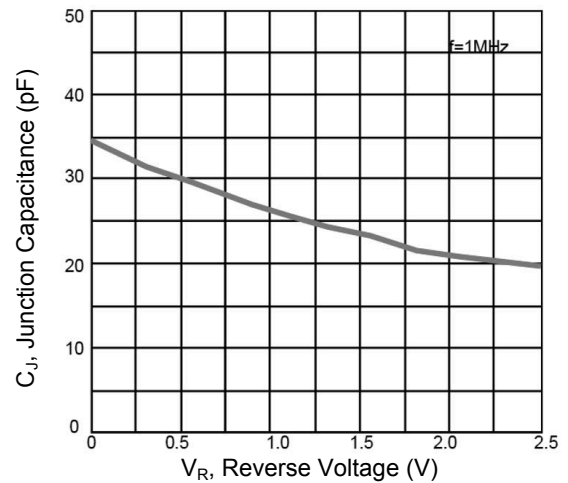


Figure 4. Capacitance vs. Reverse Voltage

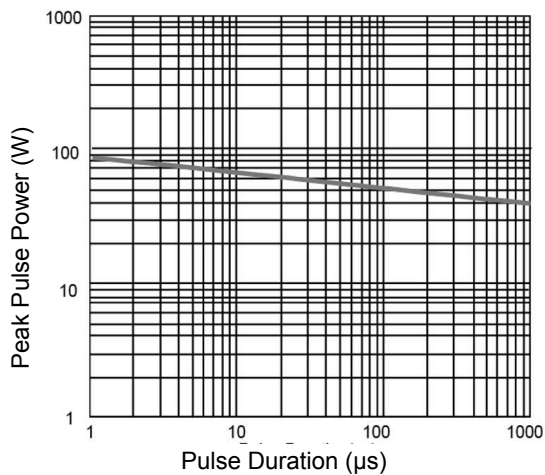
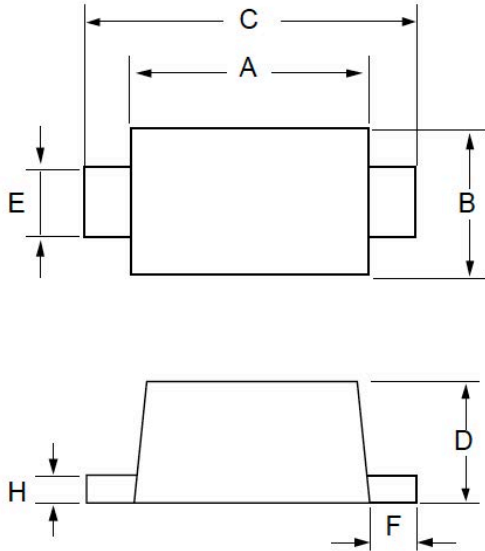


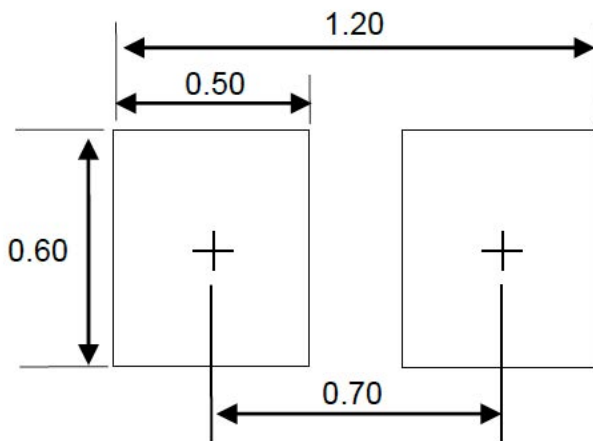
Figure 5. Non-Repetitive Peak Pulse Power vs. Pulse Time

Package Outline Dimensions (SOD-923)



Symbol	Dimensions in Inches		Dimensions in Millimeters	
	Min	Max	Min	Max
A	0.030	0.033	0.750	0.850
B	0.022	0.026	0.550	0.650
C	0.037	0.041	0.950	1.050
D	0.014	0.017	0.360	0.430
E	0.006	0.010	0.150	0.250
F	0.002	0.006	0.050	0.150
H	0.003	0.007	0.070	0.170

Recommended Pad Layout



Unit: mm

Order Information

Device	Package	Marking Code	Quantity	HSF Status
GSEM3U370	SOD-923	E1	8000 / Tape & Reel	RoHS Compliant