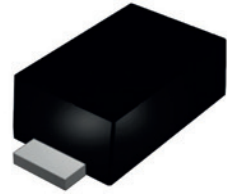
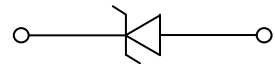


**Features**

- Ultra low capacitance
- Low clamping voltage
- ESD protection: IEC61000-4-2
- SOD-923 micro SMD package
- UL-94 V-0 / Green EMC
- Matte tin lead finish (Pb-Free)



SOD-923



Schematic Diagram

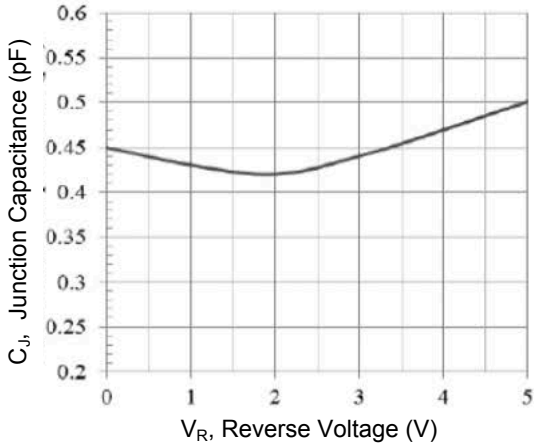
**Absolute Maximum Ratings** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Reverse Peak Pulse Current ( $t=8/20\mu\text{s}$ )	$I_{PP}$	4.5	A
ESD Voltage IEC61000-4-2 Air	$V_{\text{ESD-Air}}$	$\pm 15$	kV
ESD Voltage IEC61000-4-2 Contact	$V_{\text{ESD-contact}}$	$\pm 8$	kV
Peak Pulse Power (8/20 $\mu\text{s}$ )	$P_{PK}$	80	W
Junction Temperature Range	$T_J$	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$

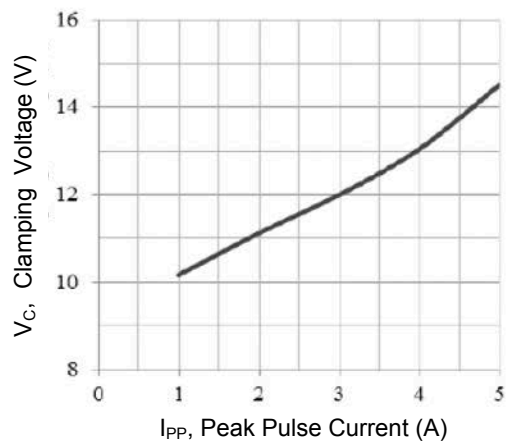
**Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Working Voltage	$V_{RWM}$	-	-	-	3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	5	-	-	V
Reverse Leakage Current	$I_R$	$V_{RWM}=3.3\text{V}$	-	-	1	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP}=1\text{A}, T_P=8/20\mu\text{S}$	-	8	12	V
Clamping Voltage	$V_C$	$I_{PP}=4.5\text{A}, T_P=8/20\mu\text{S}$	-	16	20	V
Junction Capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$	-	0.45	0.65	pF

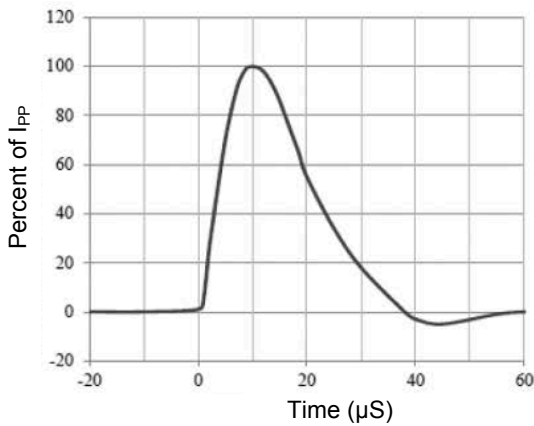
**Ratings and Characteristics Curves**



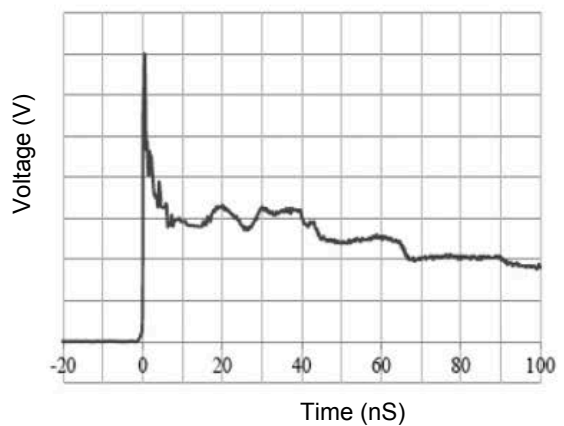
**Figure 1. Junction Capacitance vs. Reverse Voltage**



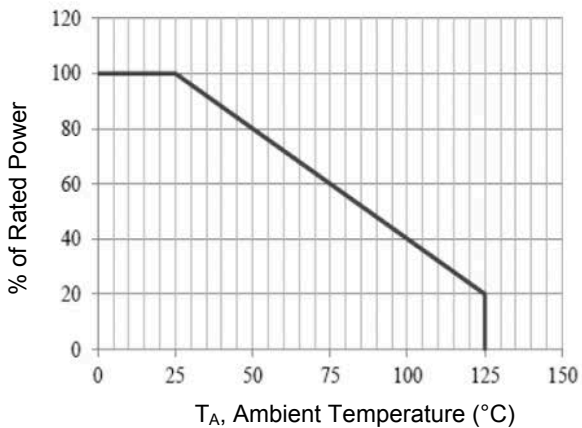
**Figure 2. Clamping Voltage vs. Peak Pulse Current**



**Figure 3. Pulse Waveform-8/20 μS**

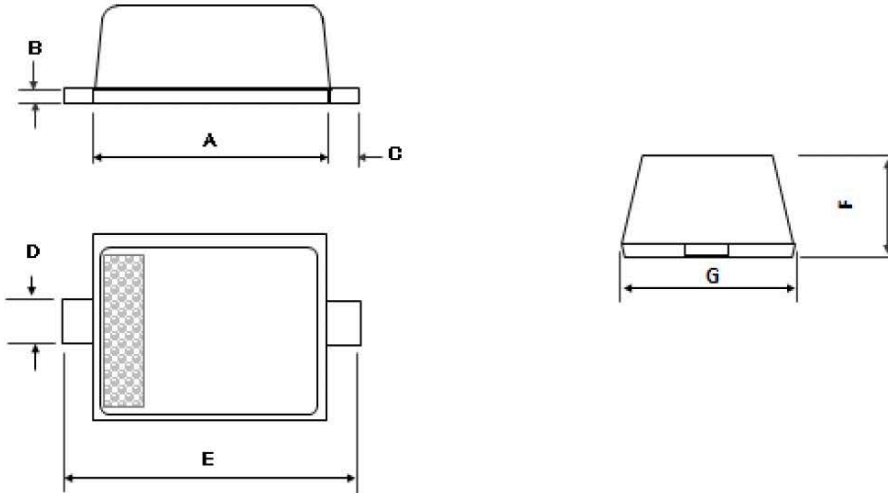


**Figure 4. IEC61000-4-2 Pulse Waveform**



**Figure 5. Power Derating Curve**

**Package Outline Dimensions (SOD-923)**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.700	0.900	0.028	0.035
B	0.050	0.200	0.002	0.008
C	0.050	0.150	0.002	0.006
D	0.150	0.300	0.006	0.012
E	0.900	1.100	0.035	0.043
F	0.390	0.450	0.015	0.018
G	0.550	0.650	0.022	0.026

**Order Information**

MPN	Package	Marking	Quantity	HSF Status
GSEM3U0045	SOD-923	P	8,000pcs / Reel	RoHS compliant