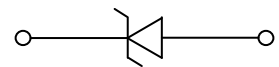


Features

- 10A Peak Pulse Current Line (TP = 8/20 μ S)
- SOD-923 package
- Unidirectional configuration
- Response Time Is Typically < 1ns
- Protect One I/O or Power Line
- Low Clamping Voltage
- Transient Protection for Data Lines to:
 IEC 61000-4-2 (ESD) \pm 15kV (air), \pm 8 kV (Contact)



SOD-923



Schematic Diagram

Mechanical Characteristics

- Lead Finish: 100% matte Sn (Tin)
- Qualified Max Reflow Temperature: 260 °C

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

Parameter	Symbol	Max.	Unit
Peak Pulse Current ($T_P=8/20\mu\text{s}$)	I_{PP}	10	A
Operation Junction Temperature	T_J	-45 To +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-45 To +125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5.0	V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}, T=25^\circ\text{C}$	-	-	1.0	μA
Reverse Breakdown Voltage	V_{BR}	$I_t=1\text{mA}$	5.8	-	8.0	V
Clamping Voltage	V_{CL}	$I_{PP}=10\text{A}, T_P=8/20\mu\text{s}$	-	-	17.0	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	60	80	pF

Typical Characteristic Curves

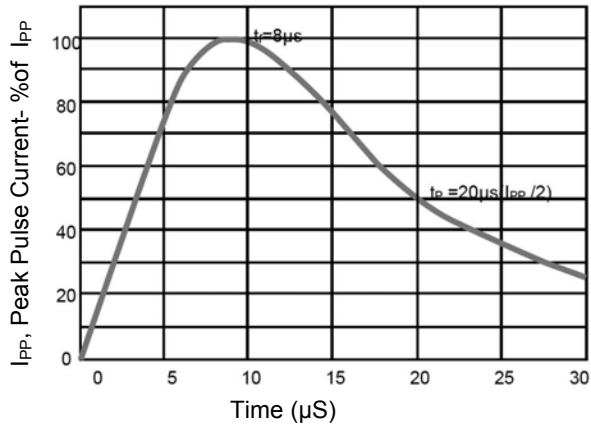


Figure 1. Pulse Waveform

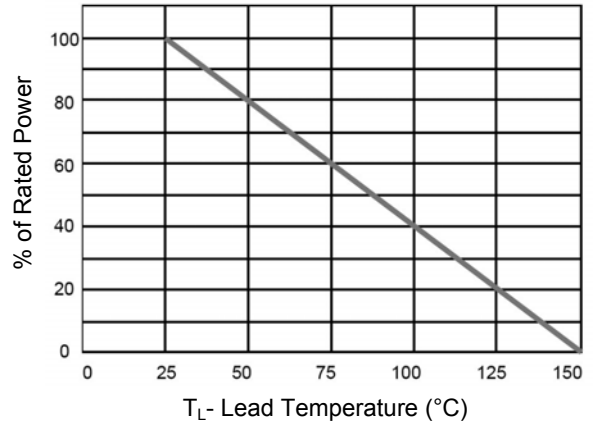


Figure 2. Power Derating Curve

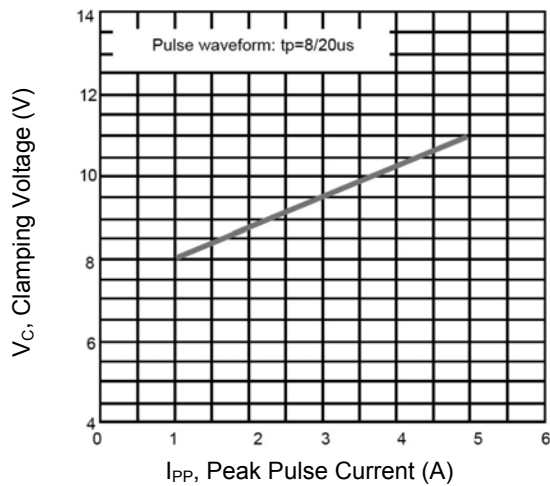


Figure 3. Clamping Voltage vs. Peak Pulse Current

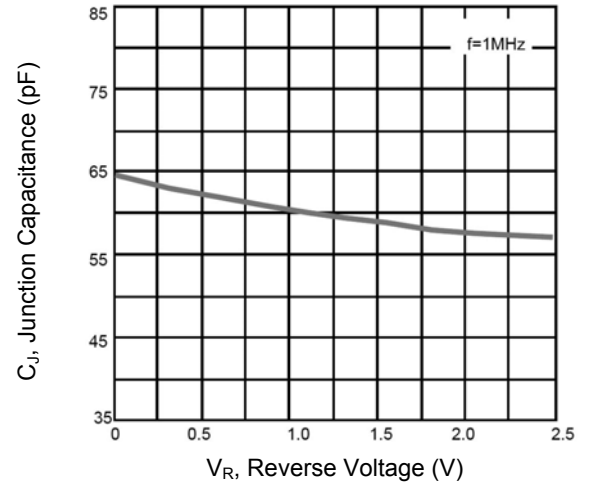


Figure 4. Capacitance vs. Reverse Voltage

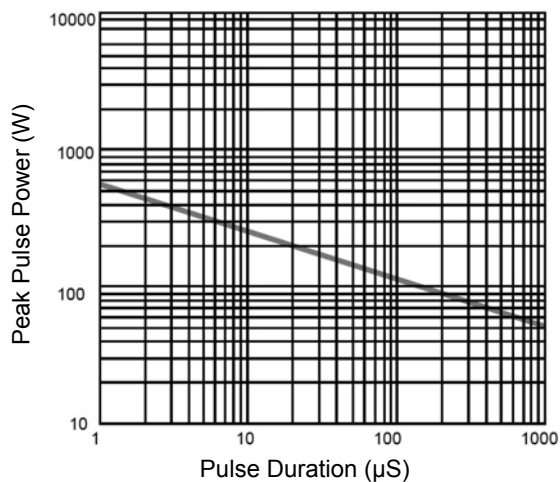
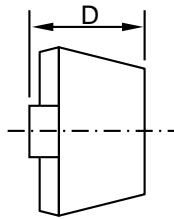
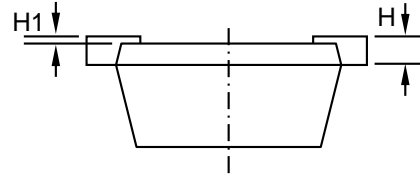
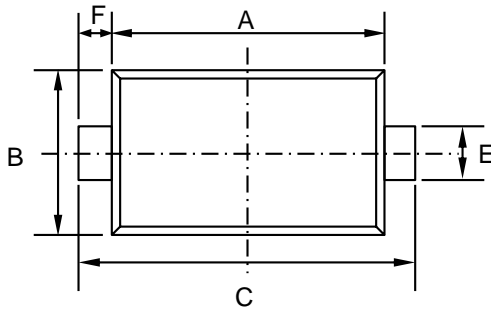


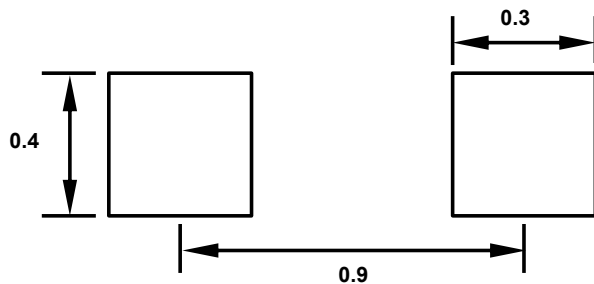
Figure 5. Non Repetitive Peak Pulse Power vs. Pulse Time

Package Outline Dimensions SOD-923



SOD-923 (unit: mm)		
Dim.	Min.	Max.
A	0.75	0.85
B	0.55	0.65
C	0.90	1.10
D	0.35	0.43
E	0.15	0.25
F	0.05	0.15
H	0.07	0.17
H1	0.00	0.05

Recommended Pad Layout



(Unit: mm)

Notes:

This recommended layout is for reference purposes only.