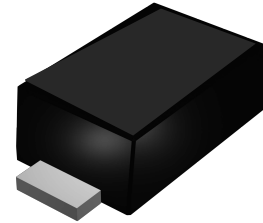


## Features

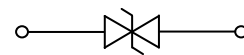
- 100 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- SOD-923 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30KV$  contact  
 $\pm 30KV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 24A (8/20 $\mu s$ )



SOD-923

## Applications

- Cell Phone
- PDA
- Notebook
- Digital Cameras
- Portable Instrumentation
- Audio and Video equipment



Schematic Diagram

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

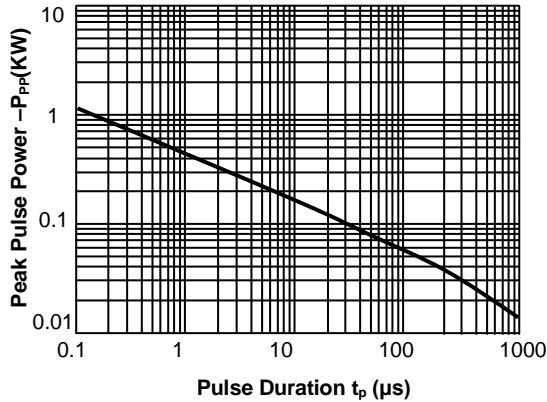
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	100	W
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	8	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ C$

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

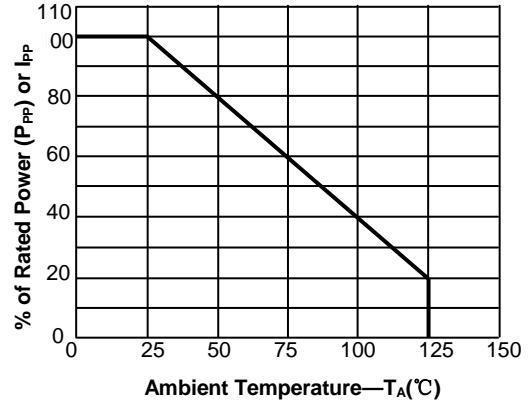
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6	6.8	8	V
Reverse Leakage Current	$I_R$	$V_R=5V$	-	-	1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=1A, T_p=8/20\mu s$	-	-	10	V
	$V_C$	$I_{PP}=8A, T_p=8/20\mu s$	-	-	13	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	15		pF

## Typical Characteristic Curves

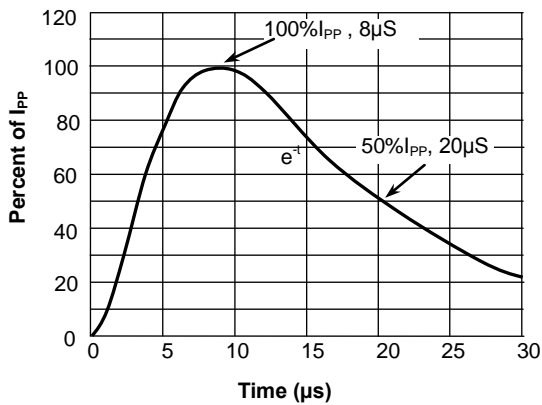
**Fig.1 Peak Pulse Power Rating Curve**



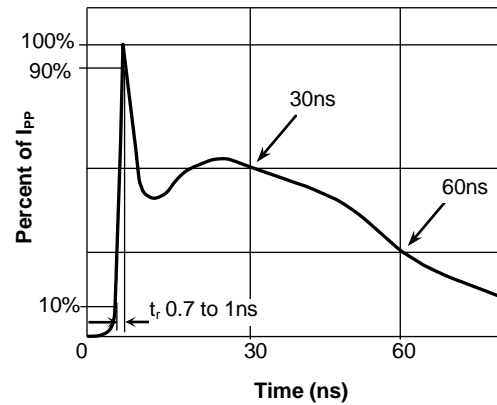
**Fig.2 Pulse Derating Curve**



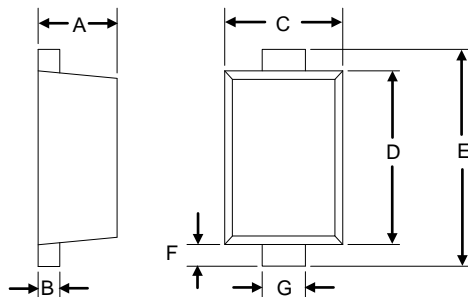
**Fig.3 Pulse Waveform-8/20 $\mu s$**



**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



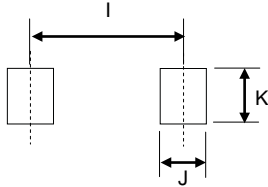
## Product Dimensions



**SOD-923**

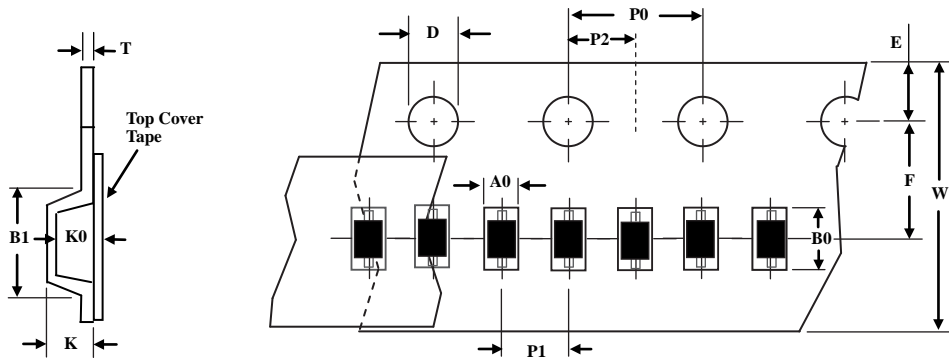
Dim	millimeters	
	min	max
A	0.34	0.40
B	0.07	0.17
C	0.55	0.65
D	0.75	0.85
E	0.95	1.05
F	0.05	0.15
G	0.15	0.25

### PAD Dimensions



Dim	millimeters
I	0.90
J	0.30
K	0.35

### Package Information

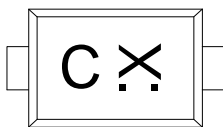


TapeSize(W)	B1 max	D	E	F	K max	P0	P1	P2	T max	W max
8	4.55	1.55±0.05	1.75±0.1	3.5±0.05	2.4	4.0±0.1	2.0±0.05	2.0±0.05	0.6	8.3

Note:1.Unit : mm

2. A0, B0, and K0 are determined by component size. The clearance between the components and the cavity must be within 0.05mm min to 0.50 mm max. The component cannot rotate more than 10° within the determined cavity.

### Marking



× : DateCode

### Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
SPESP5VD923-2B	SOD-923	0.0006g	Tape & Reel	8000pcs / Reel	RoHS compliant