

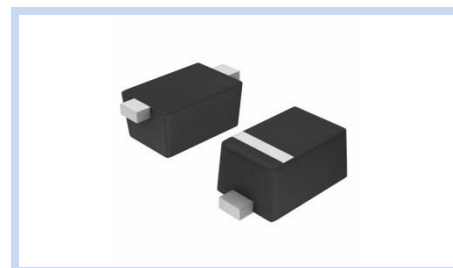
# ESD Suppressor 5V Bidirectional SOD-923

ME51B9V8S923

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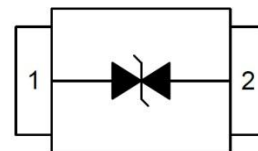
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for one Bidirectional Channel
- Low Leakage Current
- Low Clamping Voltage



## APPLICATION

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Cordless Phones
- Digital Cameras
- Peripherals



## MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	$V_{ESD}$	$\pm 8$	KV
ESD Voltage (Air discharge)		$\pm 15$	
Peak Pulse Current ( $t_p=8/20\mu s$ )	$I_{PP}$	2	A
Operating & Storage Temperature Range	$T_J, T_{STG}$	-55~+150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	$V_{RWM}$	--	--	5	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	5.6	--	8	V
Reverse Leakage Current	$V_R=5\text{V}$	$I_R$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}, t_p=8/20\mu s$	$V_C$	--	--	9.8	V
Off State Junction Capacitance	$V_{dc}=0, f=1\text{MHz}$	$C_J$	--	15	--	pF

Notes:  $T_J=25^{\circ}\text{C}$  unless otherwise specified

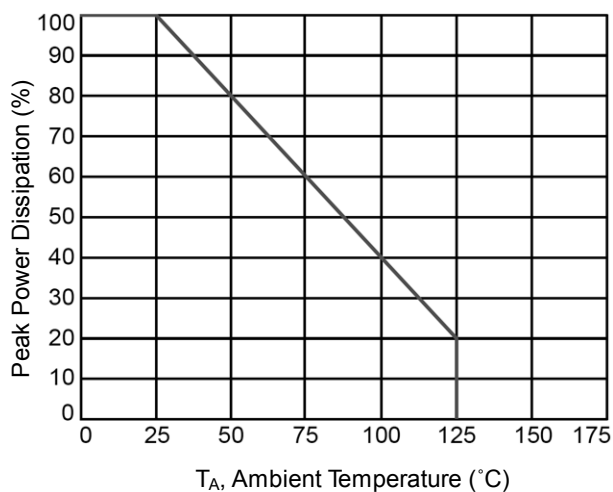
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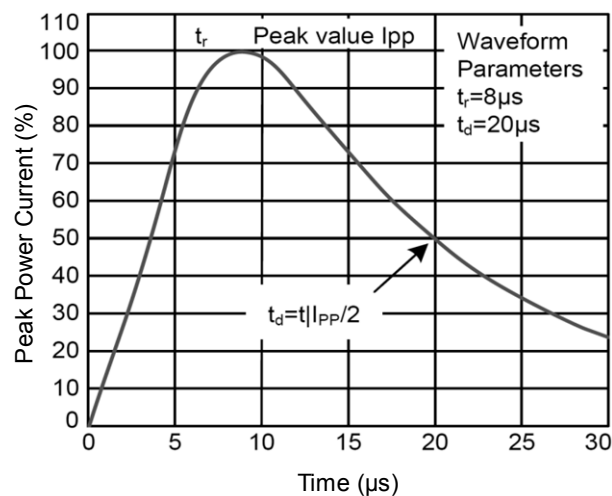
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## CHARACTERISTIC CURVES

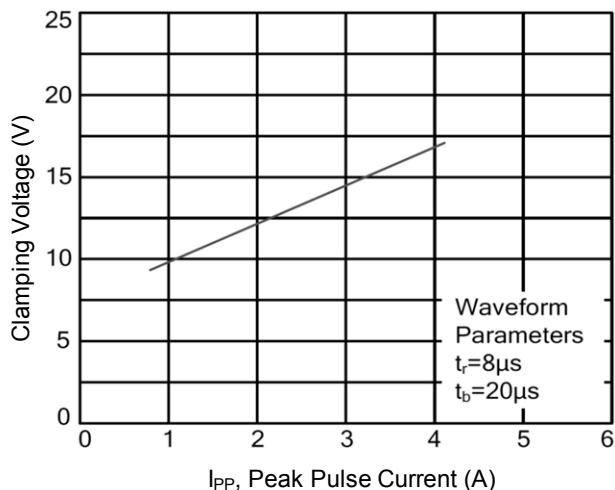
Power Derating Curve



Pulse Waveforms

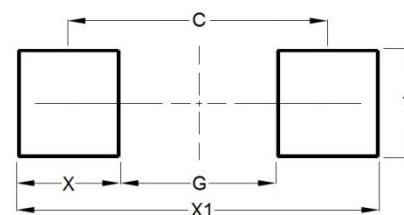
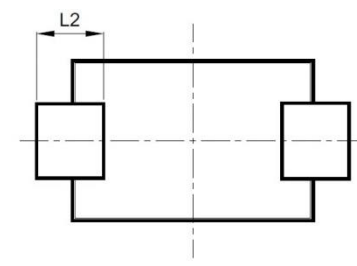
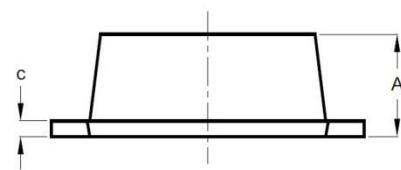
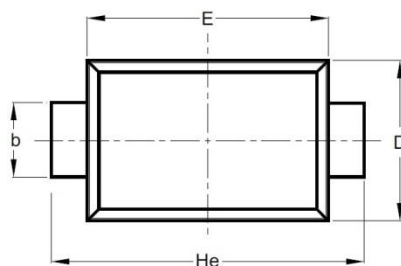


Clamping Voltage vs. Peak Pulse Current



## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.36	0.43
b	0.15	0.25
C	0.07	0.17
D	0.55	0.65
E	0.75	0.85
He	0.95	1.05
L2	0.05	0.15
C	0.90	0.90
G	0.60	0.60
X	0.30	0.30
X1	1.20	1.20
Y	0.40	0.40



\*Specifications subject to change without notice.