

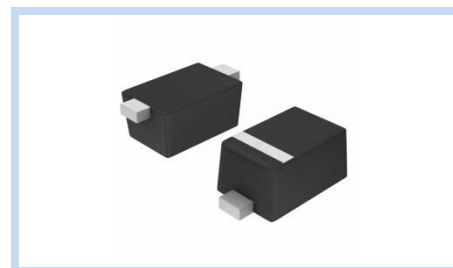
# ESD Suppressor 5V Bidirectional SOD-523

ME51B9V8S52340

MERITEK

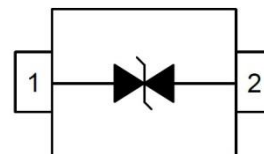
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- IEC 61000-4-4 EFT: 40A (5/50ns)
- ESD Protection for one Bidirectional Channel
- Low Leakage Current
- Low Clamping Voltage



## APPLICATION

- Cellular Handsets and Accessoried
- Notebooks, Desktops, Servers
- Portable Instrumentation
- Serial and Parallel Ports
- 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 Power (tp=8/20 $\mu$ s)	$P_{PP}$	100	W
Operating Temperature Range	$T_J$	-55~+125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-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	$I_{BR}=1\text{mA}$	$V_{BR}$	6	--	--	V
Reverse Leakage Current	$V_R=5\text{V}$	$I_R$	--	--	2	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}$ , tp=8/20 $\mu$ s	$V_C$	--	--	9.8	V
Off State Junction Capacitance	Vdc=0, f=1MHz	$C_J$	--	25	40	pF

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

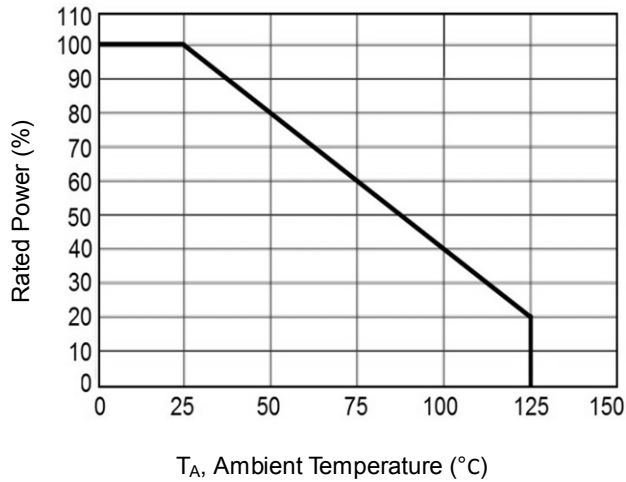
# ESD Suppressor 5V Bidirectional SOD-523

ME51B9V8S52340

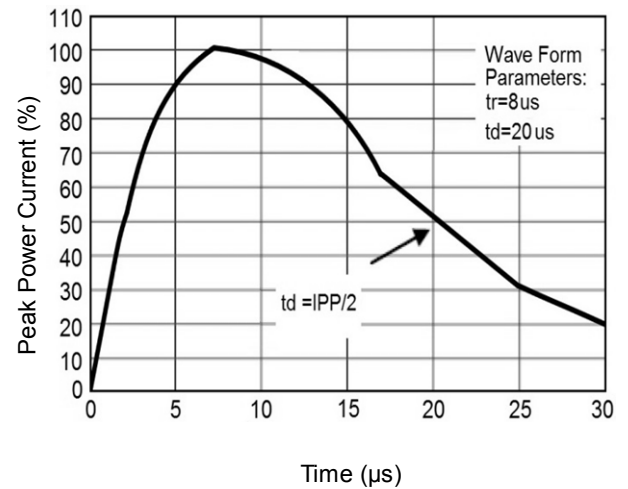
MERITEK

## CHARACTERISTIC CURVES

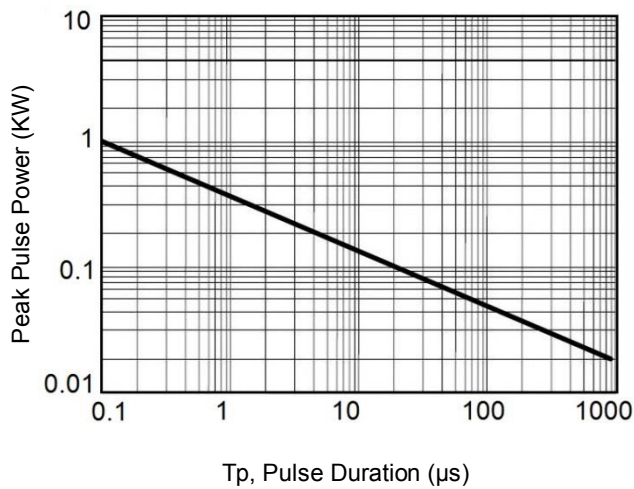
Derating Curve



Pulse Waveforms



Non- Repetitive Peak Pulse Power vs. Pulse Time



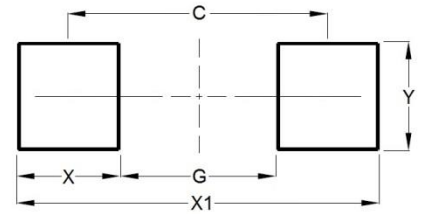
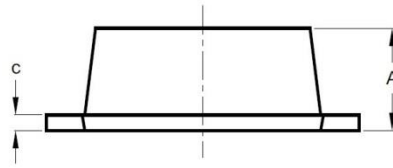
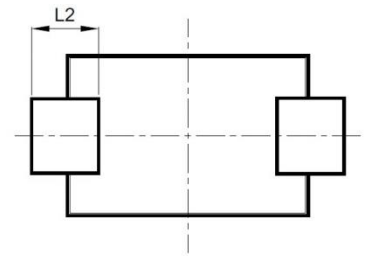
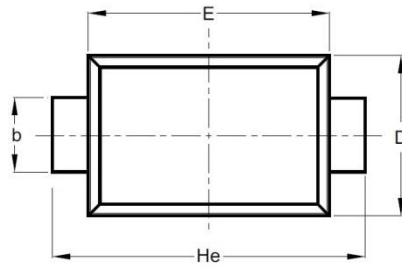
# ESD Suppressor 5V Bidirectional SOD-523

ME51B9V8S52340

MERITEK

## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.51	0.70
b	0.25	0.35
C	0.08	0.15
D	0.75	0.85
E	1.10	1.30
He	1.50	1.70
L2	0.15	0.25
C	1.40	1.40
G	0.80	0.80
X	0.60	0.60
X1	2.00	2.00
Y	0.70	0.70



\*Specifications subject to change without notice.