

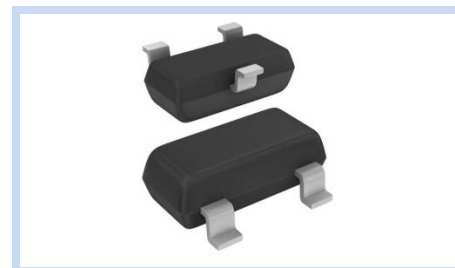
# ESD Suppressor 5V 2-Unidirectional SOT-23

ME52U9V8S23P8

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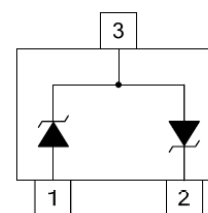
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for two Unidirectional Channels
- Ultra Low Capacitance: 0.8pF Typical
- Low Clamping Voltage
- Solid-State Silicon-Avalanche Technology



## APPLICATION

- HDMI Interface Protection
- Display Port Interface
- Antenna Applications
- USB 2.0
- GaAs Photodetector Protection



## 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 (tp=8/20 $\mu$ s)	$I_{PP}$	3	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	$I_{BR}=1\text{mA}$	$V_{BR}$	6	--	--	V
Reverse Leakage Current	$V_R=5\text{V}$ , Each I/O pin	$I_R$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}$ , tp=8/20 $\mu$ s	$V_C$	--	--	9.8	V
	$I_{PP}=3\text{A}$ , tp=8/20 $\mu$ s		--	--	15	
Off State Junction Capacitance	$V_{dc}=0$ , f=1MHz, Between I/O pins and GND	$C_J$	--	0.8	--	pF

Notes:

1.  $T_A=25^{\circ}\text{C}$  unless otherwise specified

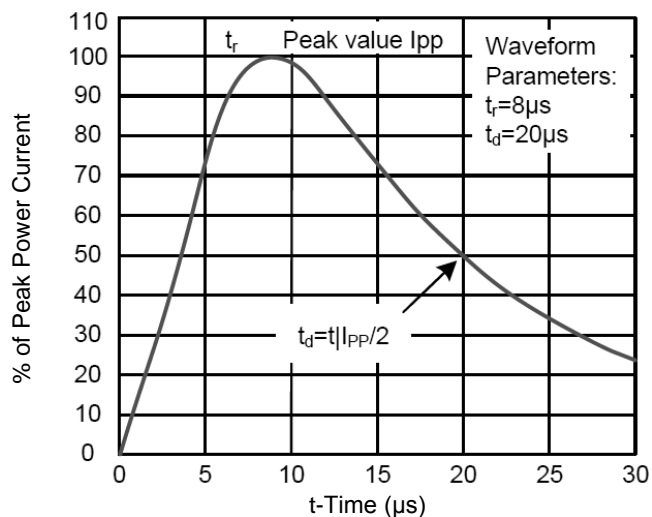
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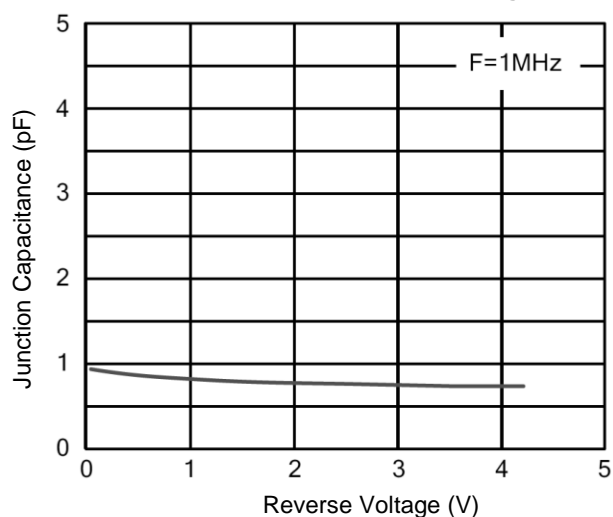
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## CHARACTERISTIC CURVES

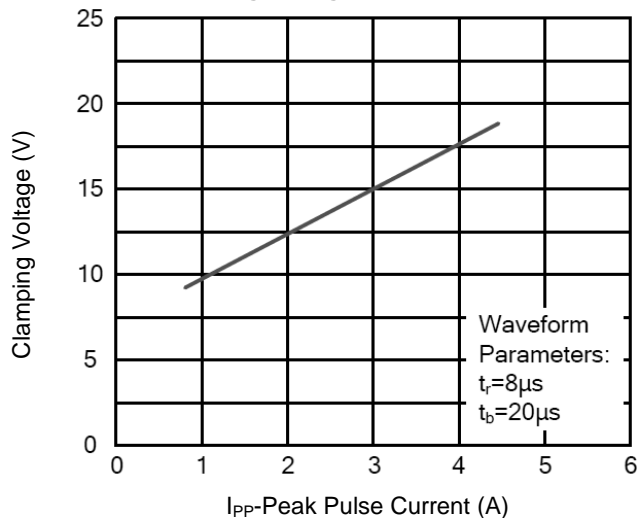
Pulse Waveforms



Capacitance vs. Reverse Voltage



Clamping Voltage vs. Peak Pulse Current



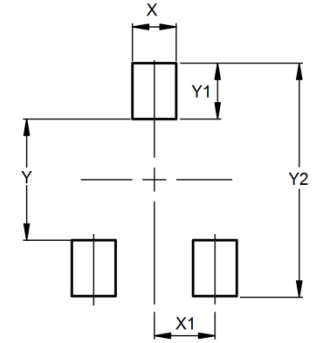
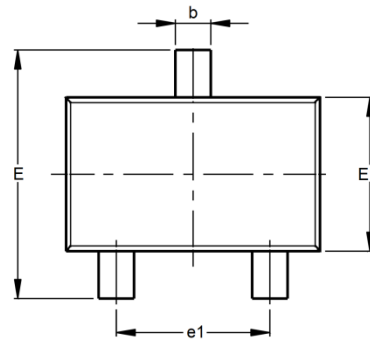
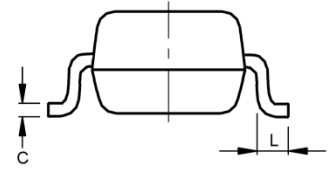
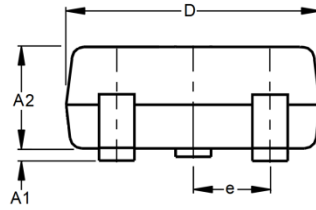
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.08	0.18
A2	0.81	0.91
b	0.35	0.50
C	--	0.13
D	2.80	3.05
e	0.95	0.95
e1	1.90	1.90
E	2.10	2.49
E1	1.19	1.40
L	0.15	--
X	0.80	0.80
X1	1.35	1.35
Y	2.00	2.00
Y1	0.90	0.90
Y2	2.90	2.90



\*Specifications subject to change without notice.