

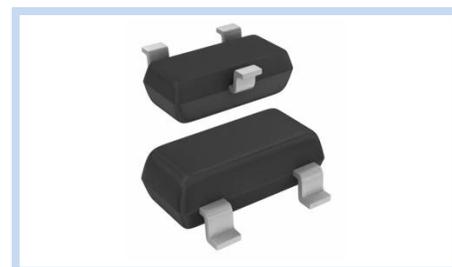
ESD Suppressor 5V 2-Unidirectional SOT-23

ME52U8S23

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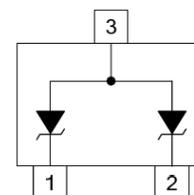
FEATURE

- IEC 61000-4-2 ESD: $\pm 30\text{KV}$ (Air) $\pm 30\text{KV}$ (Contact)
- IEC 61000-4-4 EFT: 40A (5/50ns)
- IEC 61000-4-5 Lightning: 13A (8/20 μs)
- ESD Protection for two Unidirectional Channel
- Low Clamping Voltage



APPLICATION

- Cellular Handsets and Accessories
- Portable Devices
- Set-Top Box
- Notebooks, Desktops and Servers
- RS-232, RS-422, RS-423 Interfaces



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 30	KV
ESD Voltage (Air discharge)		± 30	
Typical Thermal Resistance	$R_{\theta JA}$	350	$^{\circ}\text{C/W}$
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	--	7.5	V
Reverse Leakage Current	$V_R=5\text{V}$	I_R	--	--	1	μA
Clamping Voltage	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$	V_C	--	--	8	V
	$I_{PP}=13\text{A}, t_p=8/20\mu\text{s}$		--	--	11	
Off State Junction Capacitance	$V_{dc}=0, \text{Bias}, f=1\text{MHz}$	C_J	--	--	120	pF

Notes:

1. $T_A=25^{\circ}\text{C}$ unless otherwise specified
2. Mounted on a FR4 PCB, Single-Sided Copper, Mini Pad

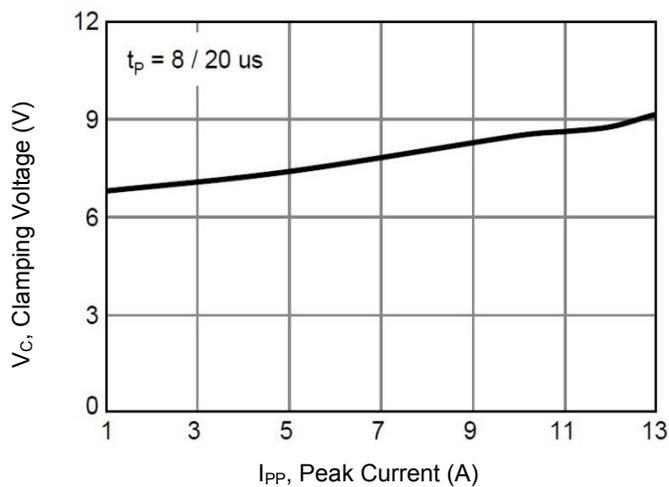
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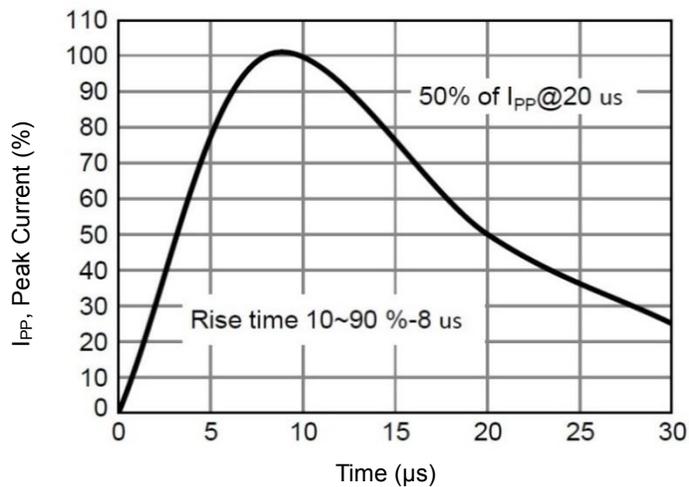
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CHARACTERISTIC CURVES

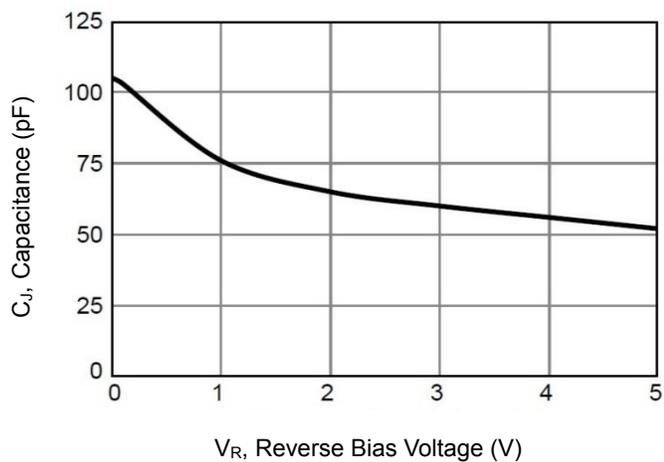
Typical Peak Clamping Voltage



Pulse Waveform



Typical Junction Capacitance



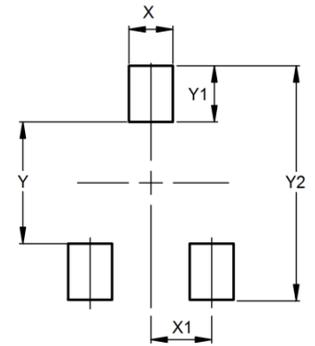
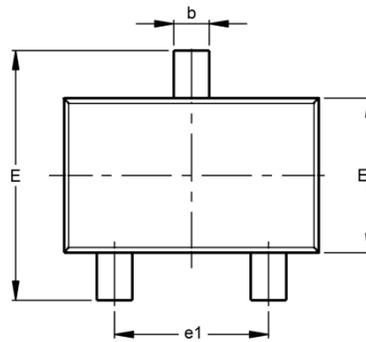
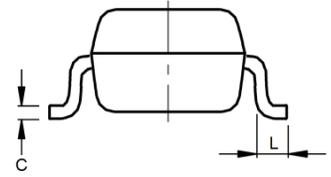
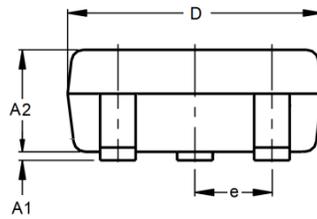
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DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.08	0.20
A2	0.82	0.90
b	0.35	0.50
C	0.00	0.10
D	2.80	3.04
e	--	--
e1	1.80	2.00
E	2.20	2.60
E1	1.20	1.40
L	0.15	--
X	0.80	0.80
X1	1.35	1.35
Y	2.90	2.90
Y1	0.90	0.90
Y2	2.00	2.00



*Specifications subject to change without notice.