

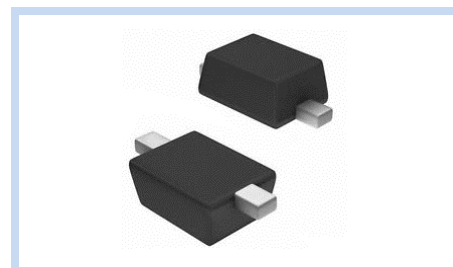
ESD Suppressor 12V Unidirectional SOD-923

ME121U23S923

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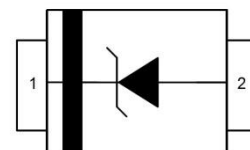
FEATURE

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



APPLICATION

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Cordless Phones
- Peripherals
- MP3 Players



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 30	KV
ESD Voltage (Air discharge)		± 30	
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	3	A
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	40	W
Lead Soldering Temperature (10 Seconds)	T_L	260	$^{\circ}\text{C}$
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}	--	--	12	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	13.3	--	--	V
Reverse Leakage Current	$V_R=12\text{V}$	I_R	--	--	1	μA
Clamping Voltage	$I_{PP}=3\text{A}, t_p=8/20\mu s$	V_C	--	--	23	V
Off State Junction Capacitance	0Vdc, $f=1\text{MHz}$	C_J	--	--	18	pF

Notes: $T_J=25^{\circ}\text{C}$ unless otherwise specified, $V_F=1.1\text{V}$ Max, $I_F=10\text{mA}$

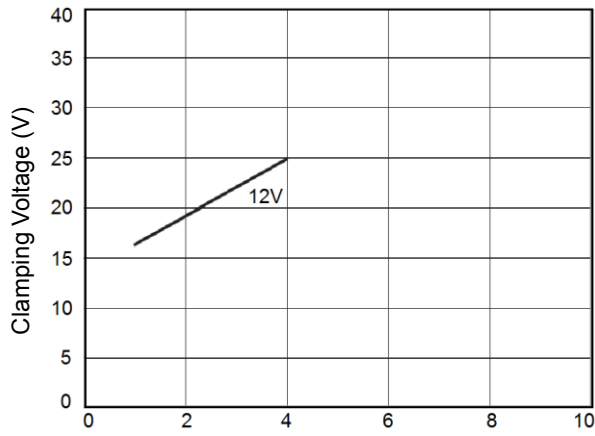
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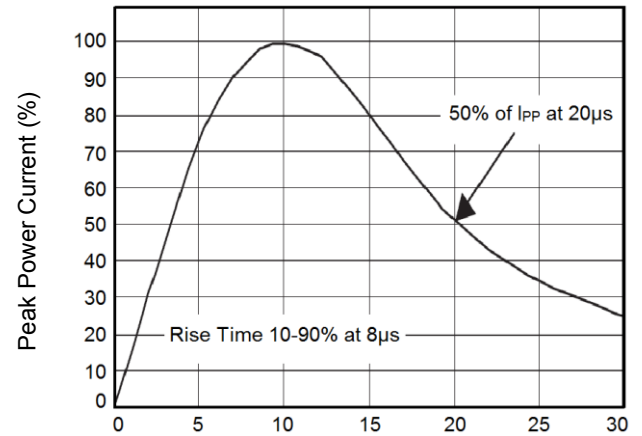
CHARACTERISTIC CURVES

Clamping Voltage vs. Peak Pulse Current



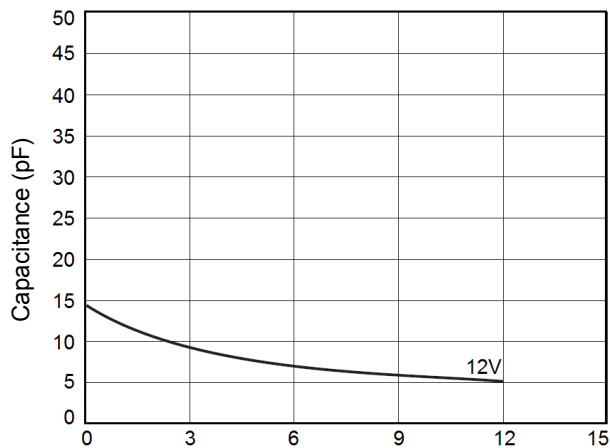
I_{PP} , Peak Pulse Current (A)

Pulse Waveforms



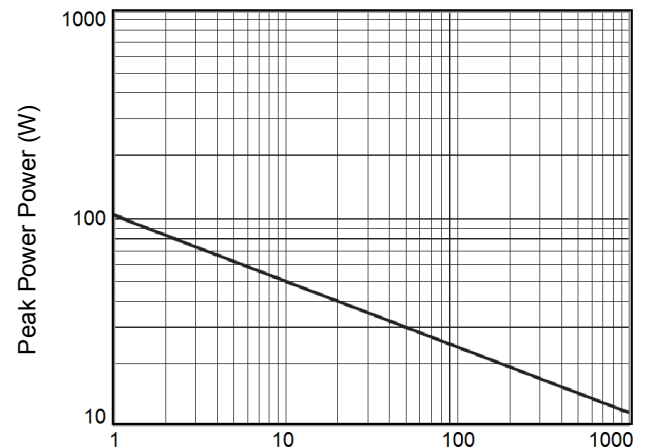
Time (μs)

Capacitance vs. Bias Voltage at 1MHz



Bias Voltage (V)

Non-Repetitive Peak Pulse Power vs. Pulse Time



Pulse Time (μs)

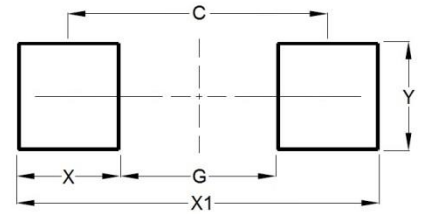
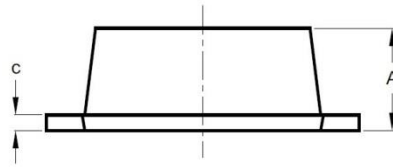
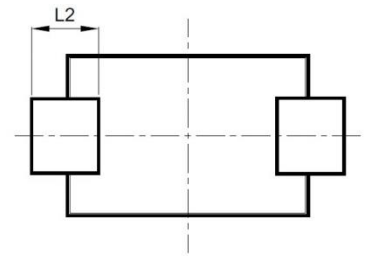
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DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.35	0.45
b	0.15	0.25
C	0.08	0.18
D	0.55	0.65
E	0.75	0.85
He	0.95	1.05
L2	0.10	0.10
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.