

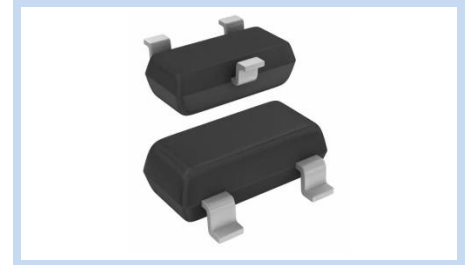
ESD Suppressor 12V 2-Bidirectional SOT-23

ME122B18S23

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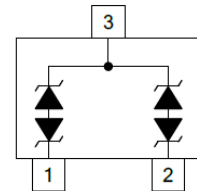
FEATURE

- IEC 61000-4-2 ESD: $\pm 30\text{KV}$ (Air) $\pm 30\text{KV}$ (Contact)
- ESD Protection for two Bidirectional Channels
- Low Clamping Voltage
- Low Leakage Current



APPLICATION

- CAN Bus Protection
- Automotive Applications
- Microprocessors Protection
- Notebooks, Desktops and Servers
- Serial and Parallel Ports Protection



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 30	KV
ESD Voltage (Air discharge)		± 30	
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	400	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}	--	--	12.0	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	13.3	--	--	V
Reverse Leakage Current	$V_{RWM}=15\text{V}$	I_R	--	--	1.0	μA
Clamping Voltage	$I_{PP}=1\text{A}$, $t_p=8/20\mu s$	V_C	--	--	18	V
Clamping Voltage	$I_{PP}=12\text{A}$, $t_p=8/20\mu s$	V_C	--	--	28	V
Off State Junction Capacitance	$V_{dc}=0$, $f=1\text{MHz}$	C_J	--	50	65	pF

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

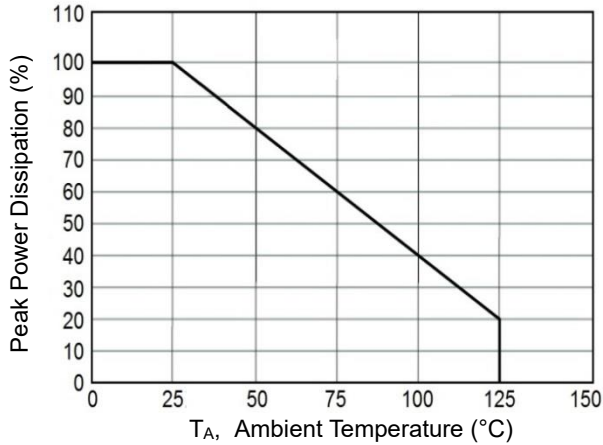
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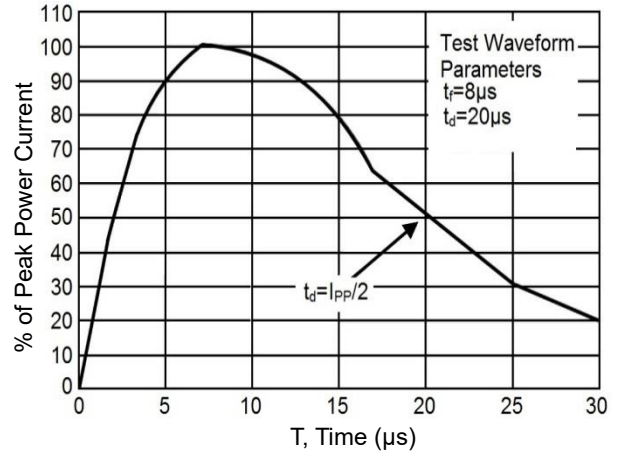
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CHARACTERISTIC CURVES

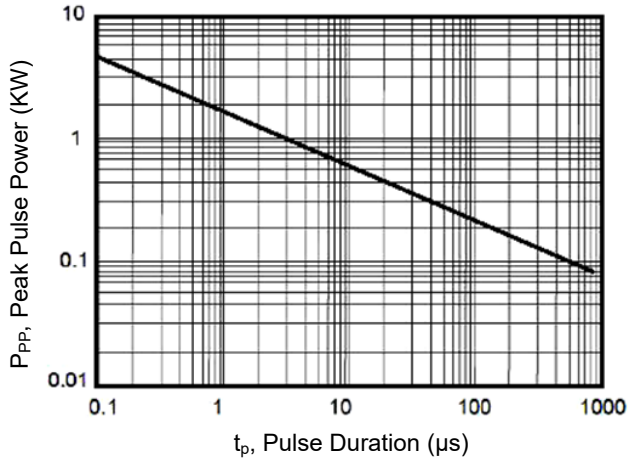
Power Derating Curve



Pulse Waveforms

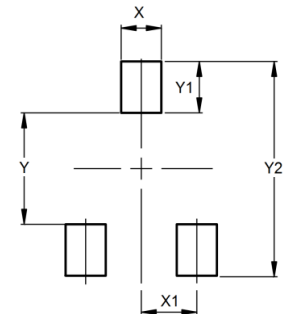
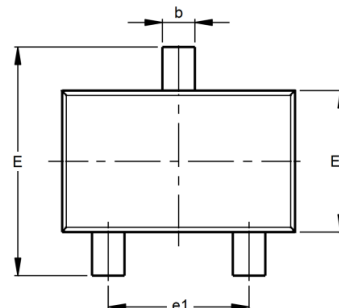
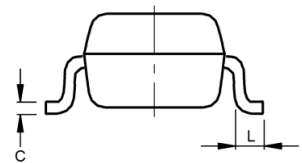
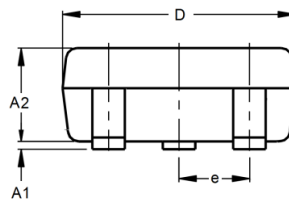


Non-Repetitive Peak Pulse vs. Pulse Time



DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.08	0.20
A2	0.81	1.20
b	0.30	0.50
C	0.00	0.10
D	2.70	3.10
e	--	--
e1	1.78	2.04
E	2.10	2.80
E1	1.20	1.60
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

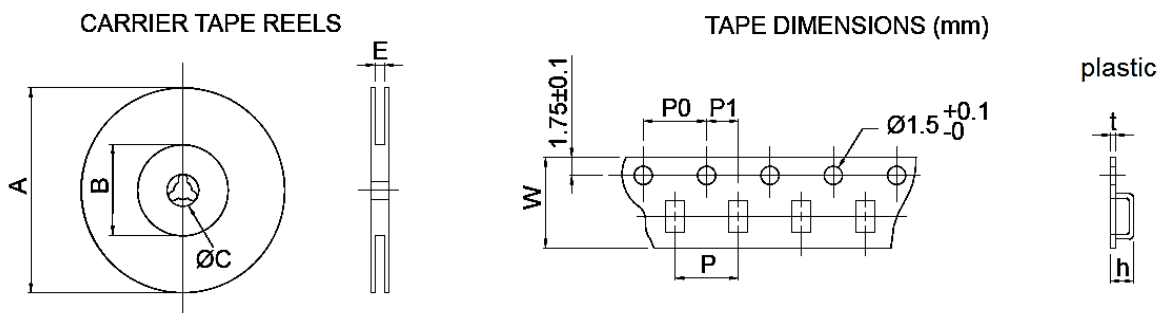


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PACKAGING DIMENSION



Package	Reel Dimension (mm)				Tape Dimensions (mm)						Parts Per Reel
	A ± 2.0	B Min.	C ± 0.2	E Max.	W ± 0.20	P ± 0.10	P0 ± 0.10	P1 ± 0.10	h ± 0.10	t ± 0.05	Plastic 7"
SOT-23	178.0	54.0	13.0	13.50	8.00	4.00	4.00	2.00	1.15	0.20	3,000

*Specifications subject to change without notice.