

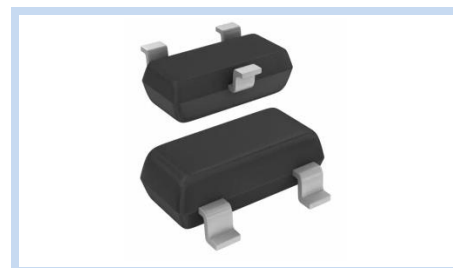
# ESD Suppressor 12V 2- Unidirectional SOT-23

ME122U19S2355

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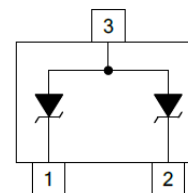
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for one Bidirectional Channel
- ESD Protection for two Unidirectional Channels
- Low Clamping Voltage
- Low Leakage Current



## APPLICATION

- Data Line Protection
- Industrial Controls
- Notebook Computers
- Set-Top Box
- Projection TV
- Cellular Handsets and Accessories



## 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 ( $t_p=8/20\mu\text{s}$ )	$I_{PP}$	10	A
Peak Pulse Power ( $t_p=8/20\mu\text{s}$ )	$P_{PP}$	300	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	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	13.3	--	--	V
Reverse Leakage Current	$V_{RWM}=12\text{V}$	$I_R$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$	$V_C$	--	--	19	V
Off State Junction Capacitance	$V_{dc}=0$ , $f=1\text{MHz}$	$C_J$	--	40	55	pF

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

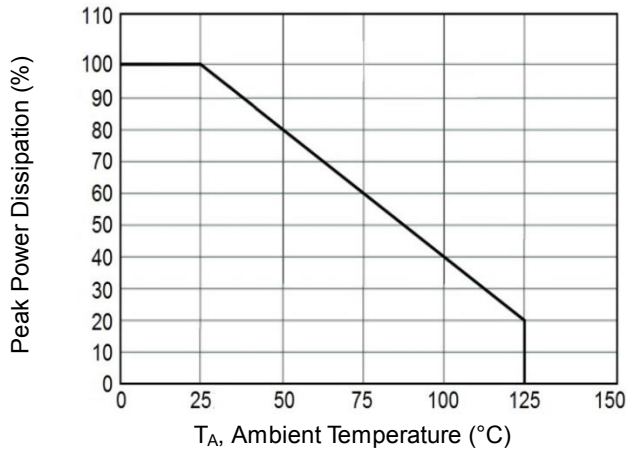
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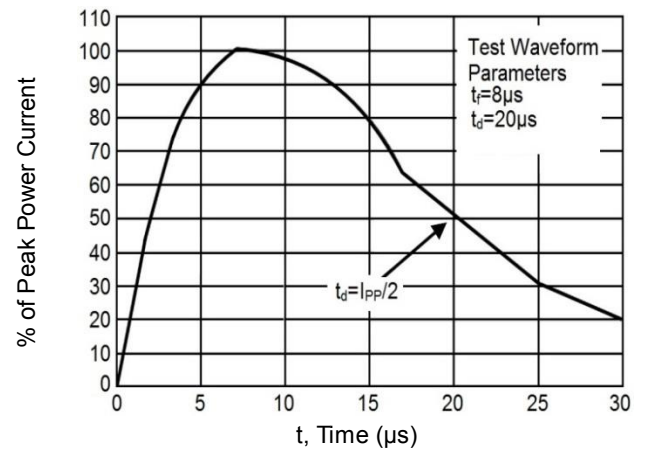
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## CHARACTERISTIC CURVES

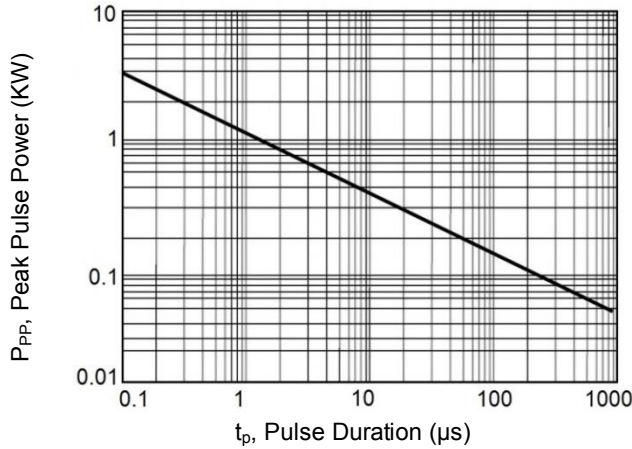
Power Derating Curve



Pulse Waveforms

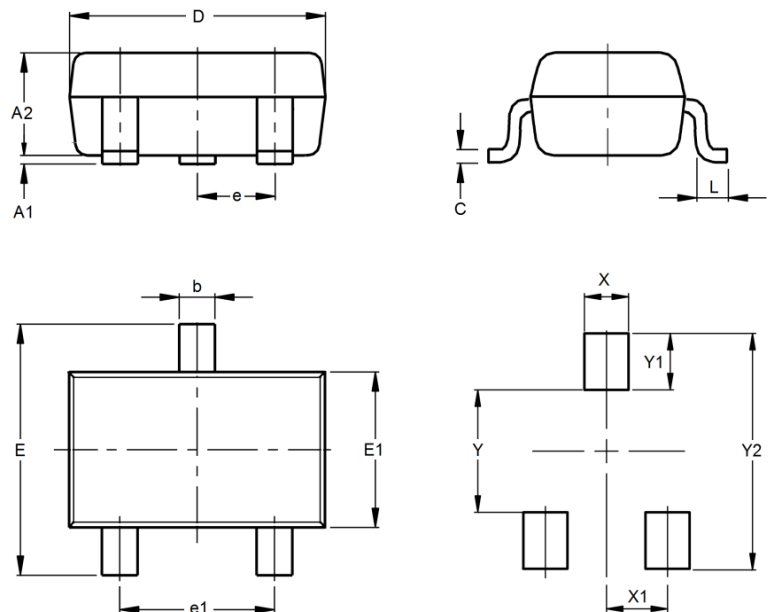


Non-Repetitive Peak Pulse vs. Pulse Time



## 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



\*Specifications subject to change without notice.