

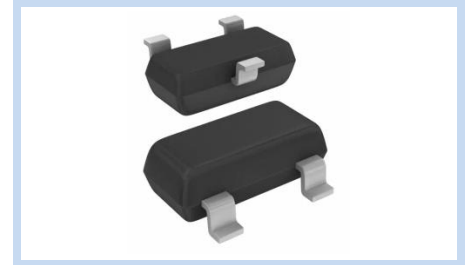
# ESD Suppressor AEC-Q101 22V 2-Unidirectional SOT-23

ME222U36S23A

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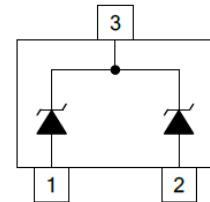
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for two Unidirectional Channels
- Working Peak Reverse Voltage of 22V
- Maximum Leakage Current of 50nA at  $V_{RWM}$
- AEC-Q101 Qualified



## APPLICATION

- Instrumentation Equipment
- Computer Monitor Interface Port Protection
- Portable Devices
- Data Transmission Line Ports



## MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	$V_{ESD}$	$\pm 8$	KV
ESD Voltage (Air discharge)		$\pm 15$	
ESD Voltage (HBM)		$> 25$	
Power Dissipation	$P_D$	150	W
Peak Pulse Power ( $t_p=8/20\mu\text{s}$ )	$P_{PP}$	150	W
Peak Pulse Power ( $t_p=10/1000\mu\text{s}$ )	$P_{PP}$	25	W
Operating Temperature Range	$T_J$	$-55 \sim +125$	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	$-55 \sim +150$	$^{\circ}\text{C}$
Lead Soldering Temperature (Max 10sec)	$T_L$	260	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	$V_{RWM}$	--	--	22.00	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	25.65	--	28.35	V
Reverse Leakage Current	$V_R=22.00\text{V}$	$I_R$	--	--	50.00	nA
Clamping Voltage	$I_{PP}=4\text{A}$ , $t_p=8/20\mu\text{s}$	$V_C$	--	--	36.00	V
	$I_{PP}=0.85\text{A}$ , $t_p=10/1000\mu\text{s}$		--	--	30.00	
Off State Junction Capacitance	$V_{dc}=0$ , Bias, $f=1\text{MHz}$ , Between I/O pins to pin 3	$C_J$	--	--	50.00	pF

Notes:

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

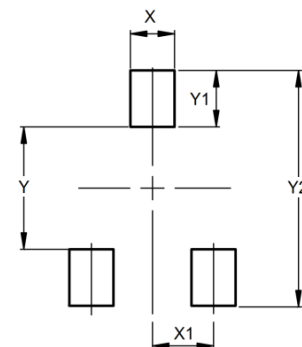
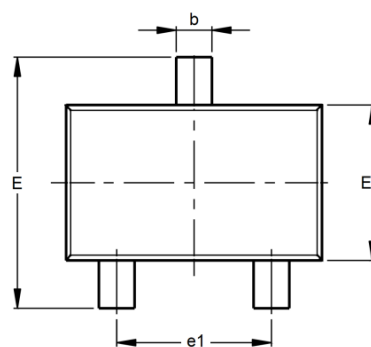
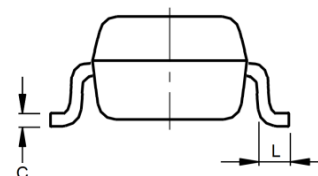
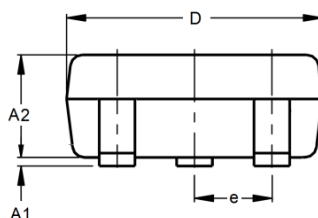
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

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.