

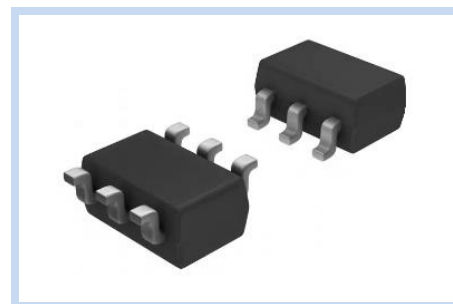
ESD Suppressor AEC-Q101 5V 4-Bidirectional SOT-23-6

ME54B9S236A

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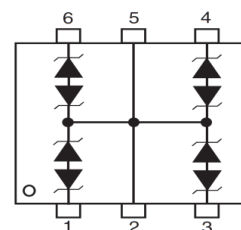
FEATURE

- IEC 61000-4-2 ESD: $\pm 15\text{KV}$ (Air) $\pm 8\text{KV}$ (Contact)
- ESD Protection for four Bidirectional Channels
- Very Low Clamping Voltage
- Low Leakage Current
- Power Dissipation: 150W (8/20 μs)
- AEC-Q101 Qualified



APPLICATION

- Portable Instrumentation
- Personal Digital Assistant (PDA)
- Mobile Devices and Accessories
- Computer Data Ports
- Sim Card Port Protection



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 8	KV
ESD Voltage (Air discharge)		± 15	
ESD Voltage (HBM)	V_{ESD}	>25	
Peak Pulse Power (8/20 μs)	P_{PP}	150	W
Peak Pulse Current (8/20 μs)	I_{PP}	14	A
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}	--	--	5.00	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	6.20	--	7.20	V
Reverse Leakage Current	$V_R=5\text{V}$	I_R	--	--	1.00	μA
Clamping Voltage	$I_{PP}=5\text{A}, t_p=8/20\mu\text{s}$	V_C	--	--	9.00	V
	$I_{PP}=10\text{A}, t_p=8/20\mu\text{s}$		--	--	11.00	
Off State Junction Capacitance	$V_{dc}=0$, Bias, $f=1\text{MHz}$, Between I/O pins and Pin 7	C_J	--	--	90	pF
	$V_{dc}=5$, Bias, $f=1\text{MHz}$, Between I/O pins and Pin 7		--	--	50	

Notes:

1. $T_J=25^{\circ}\text{C}$ unless otherwise specified
2. Non-repetative current pulse
3. Mounted on copper pads to each terminal
4. A Transient Suppressor is selected according to the working peak reverse voltage (V_{RWM}), Which should equal to or greater than the DC or Continuous peak operation voltage level

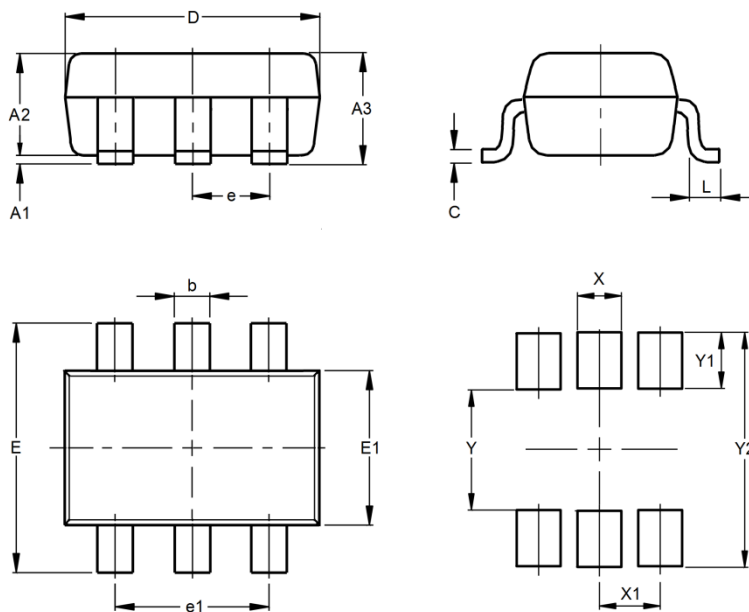
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DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.00	0.15
A2	1.30	0.90
A3	0.00	1.45
b	0.30	0.50
C	0.08	0.22
D	2.80	3.00
e	0.00	0.95
e1	0.00	1.90
E	2.60	3.00
E1	1.50	1.70
L	0.30	0.60
Y	1.60	1.60
Y1	0.79	0.79
Y2	3.10	3.10
X	0.55	0.55
X1	0.94	0.94



*Specifications subject to change without notice.