

# ESD Suppressor

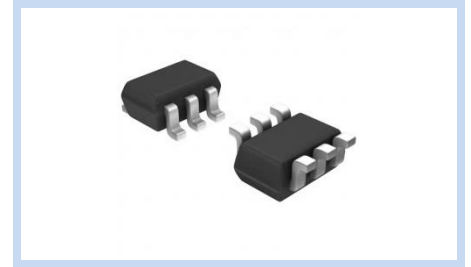
## 3.3V 4-Unidirectional SOT-363

ME3V34U8V5S363

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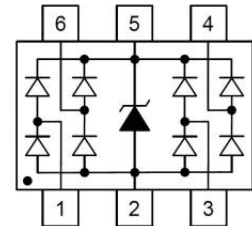
### FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for four Unidirectional Channels
- Low Leakage Current
- Clamping Voltage
- Low Capacitance
- Solid-State Silicon-Avalanche Technology



### APPLICATION

- USB Power And Data Line Protection
- 10/100/1000 Ethernet
- Video Line Protection
- LAN/WAN Device
- Microcontroller Input Protection
- Portable Devices



### 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 ( $t_p=8/20\mu s$ )	$I_{PP}$	4	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	--	$V_{RWM}$	--	--	3.3	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	4.5	--	--	V
Reverse Leakage Current	$V_R=3.3\text{V}$ , Each I/O pin	$I_R$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}$ , $t_p=8/20\mu s$	$V_C$	--	--	8.5	V
	$I_{PP}=4\text{A}$ , $t_p=8/20\mu s$		--	--	15	
Off State Junction Capacitance	$V_{dc}=0$ , $f=1\text{MHz}$ , Between I/O pins and GND	$C_J$	--	0.5	--	pF

Notes:

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

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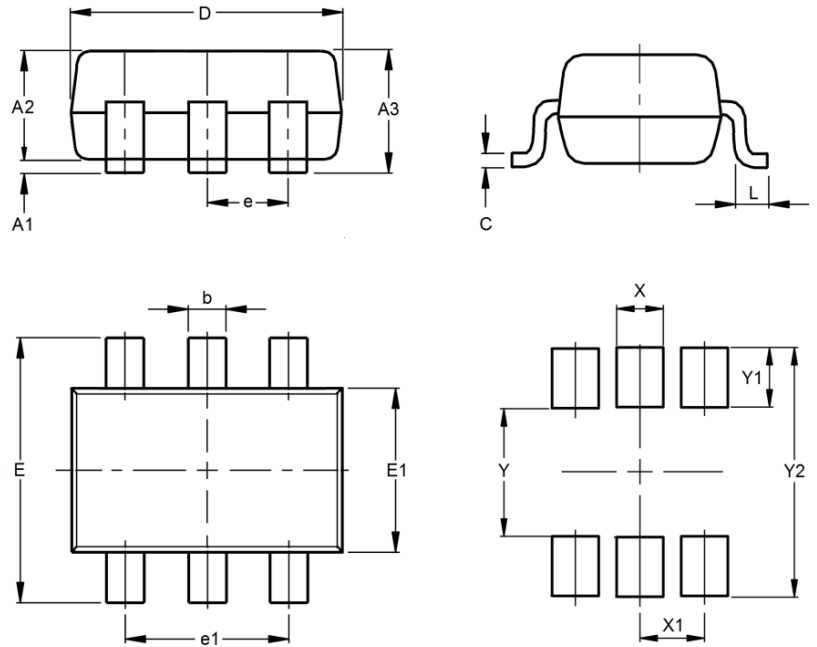
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### DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.00	0.10
A2	0.80	0.90
A3	0.80	1.00
b	0.15	0.30
C	0.10	0.25
D	1.85	2.15
e	0.65	0.65
e1	1.30	1.30
E	1.90	2.30
E1	1.10	1.40
L	0.25	-
Y	1.25	1.25
Y1	0.60	0.60
Y2	2.30	2.30
X	0.42	0.42
X1	0.65	0.65



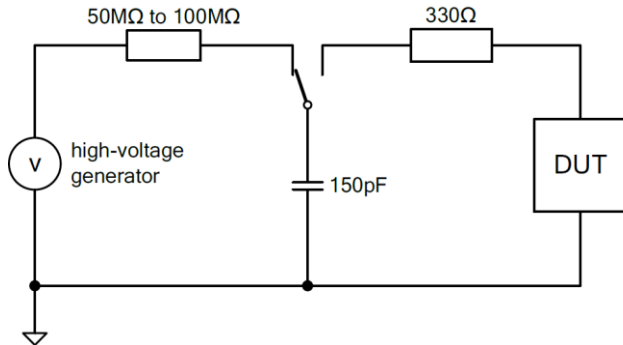
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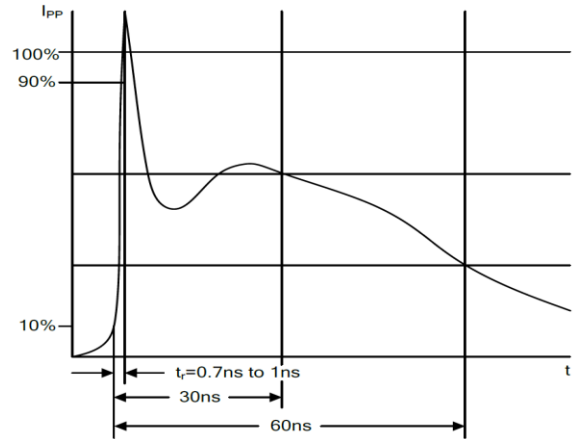
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## ESD PROTECTION STANDARDS

### IEC61000-4-2

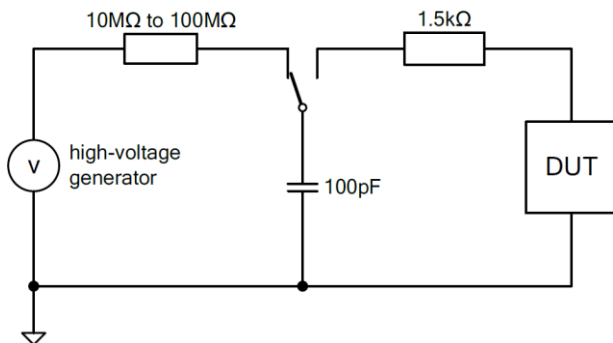


Test Circuit according to IEC61000-4-2

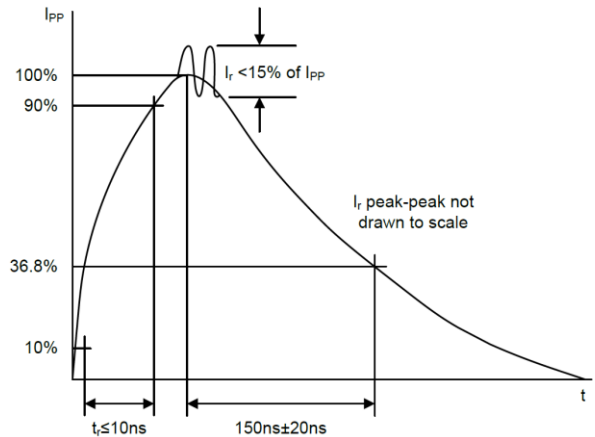


ESD Surge according to IEC61000-4-2

### Human Body Model (HBM, 883E method 3015.7)



Test Circuit according to MIL-883E method 3015.7



ESD Surge according to MIL-883E method 3015.7

\*Specifications subject to change without notice.