

# ESD Suppressor

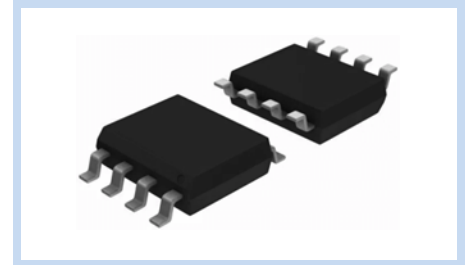
## 3.3V 4-Bidirectional SOIC-08

ME3V34B12V5SO8

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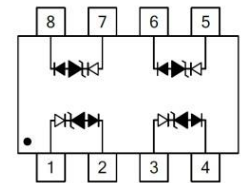
### FEATURE

- IEC 61000-4-2 ESD:  $\pm 30\text{KV}$  (Air)  $\pm 30\text{KV}$  (Contact)
- ESD Protection for four Bidirectional Channels
- Low Leakage Current
- Low Operating and Clamping Voltage
- Solid-State Silicon-Avalanche Technology



### APPLICATION

- 10/100/1000 Ethernet
- WAN/LAN Equipment
- High Current Switching Systems
- Desktops, Servers, and Notebook
- Instrumentation



### MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	$V_{ESD}$	$\pm 30$	KV
ESD Voltage (Air discharge)		$\pm 30$	
Peak Pulse Current (tp=8/20 $\mu$ s)	$I_{PP}$	20	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	$I_R$	--	--	0.1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=5\text{A}$ , tp=8/20 $\mu$ s	$V_C$	--	--	12.5	V
Off State Junction Capacitance	Vdc=0, f=1MHz, Between I/O pins and GND	$C_J$	--	--	1.5	pF
	Vdc=0, f=1MHz, Line to Line, Two I/O pins connected together on line		--	--	3.0	

Notes:

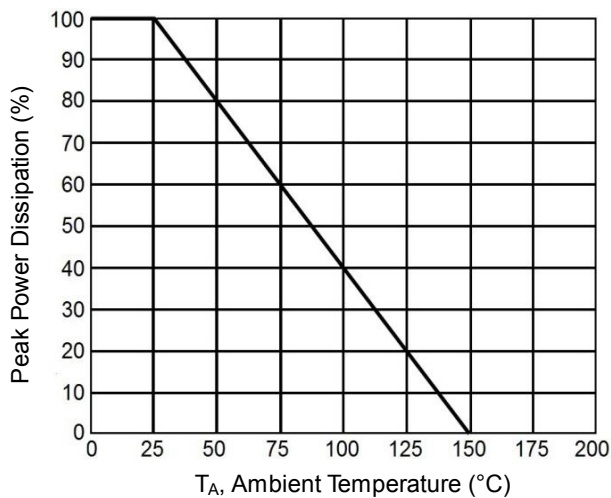
1.  $T_J=25^{\circ}\text{C}$  unless otherwise specified.

2. Ratings with two pins connected together per the recommended configuration

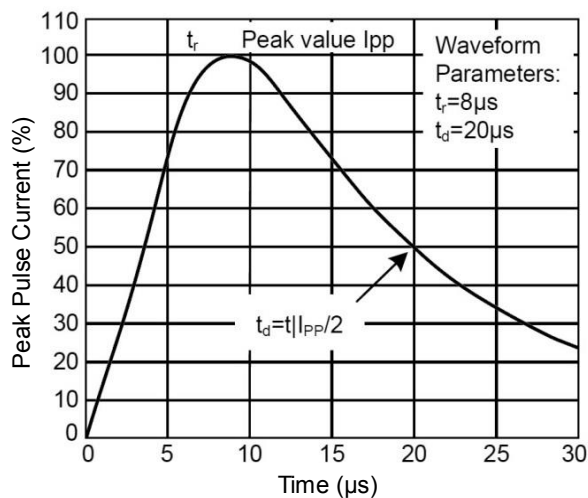
(i.e. pin 1 connected to pin 8, pin 2 connected to pin 7, pin 3 connected to pin 6, pin 4 connected to pin 5).

**CHARACTERISTIC CURVES**

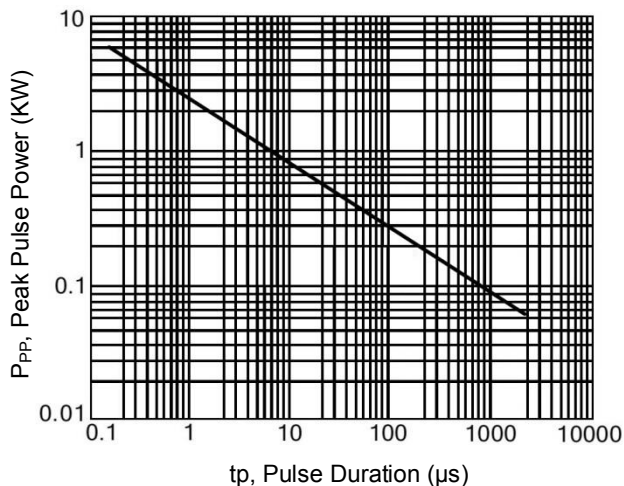
**Derating Curve**



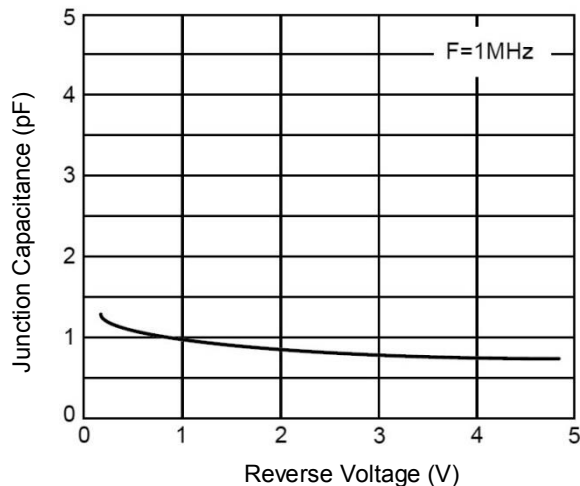
**Pulse Waveforms**



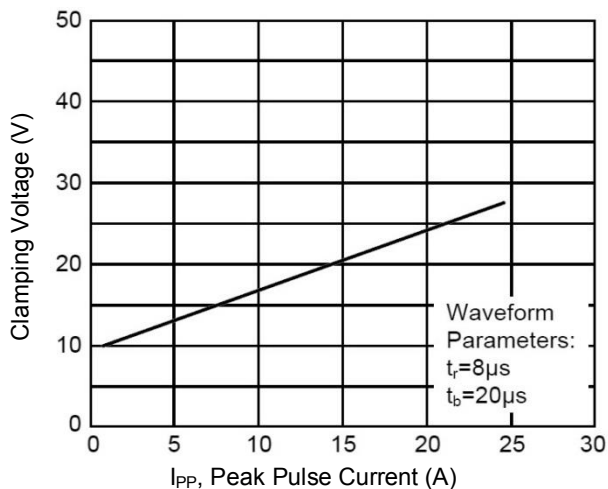
**Non-Repetitive Peak Pulse vs. Pulse Time**



**Capacitance vs. Reverse Voltage**



**Clamping Voltage vs. Peak Pulse Current**



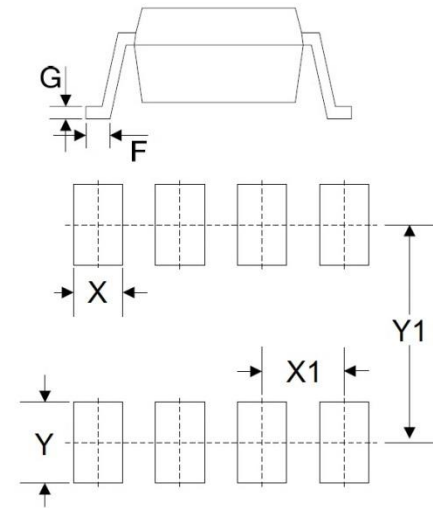
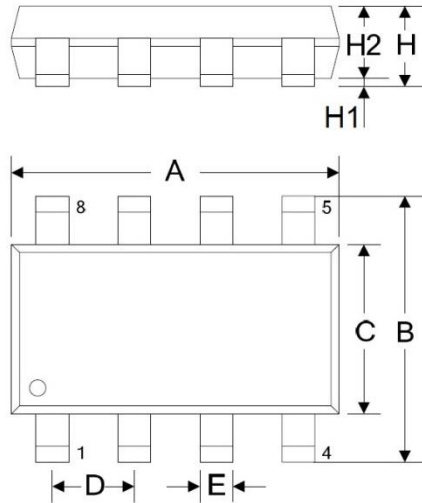
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ME3V34B12V5SO8

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## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	4.80	5.00
B	5.80	6.20
C	3.80	4.00
D	1.27	1.27
E	0.33	0.51
F	0.40	1.27
G	0.19	0.25
H	1.35	1.75
H1	0.10	0.25
H2	1.45	1.45
X	0.73	0.73
X1	1.27	1.27
Y	1.20	1.20
Y1	6.60	6.60



\*Specifications subject to change without notice.