

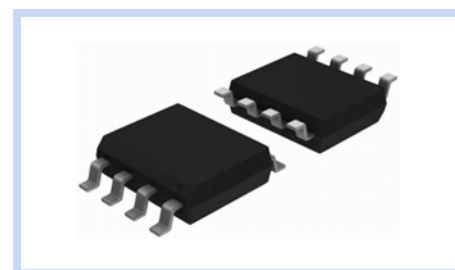
# ESD Suppressor 12V 4-Unidirectional SOIC-08

ME124U19SO8

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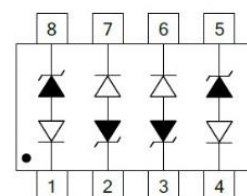
## FEATURE

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



## APPLICATION

- Multi-Mode Transceiver Protection
- Ethernet 10/100 Base T
- Audio/Video Inputs
- ADSL Interfaces
- RS-422, RS-232, & RS-499 Interfaces



## 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 ( $t_p=8/20\mu\text{s}$ )	$I_{PP}$	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	--	$V_{RWM}$	--	--	12	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	13.4	--	--	V
Reverse Leakage Current	$V_R=12$ , Each I/O Pin	$I_R$	--	--	4	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$	$V_C$	--	--	19	V
	$I_{PP}=5\text{A}$ , $t_p=8/20\mu\text{s}$		--	--	32.9	
Off State Junction Capacitance	$V_{dc}=0$ , $f=1\text{MHz}$ , Between I/O pins and GND	$C_J$	--	25	--	pF

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

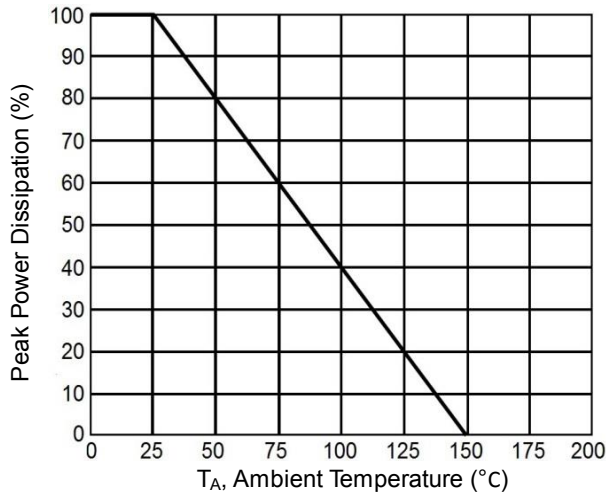
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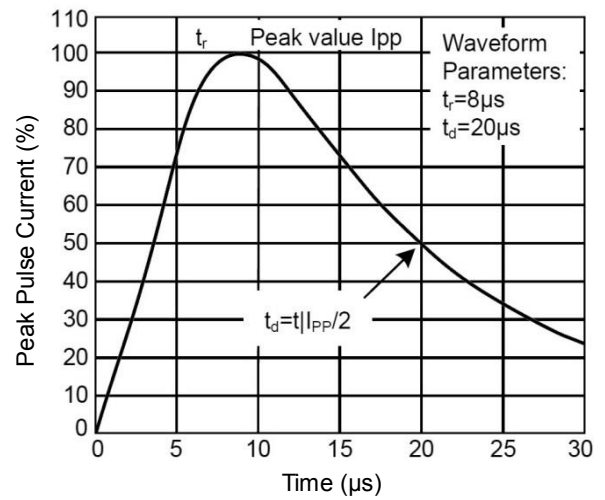
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## CHARACTERISTIC CURVES

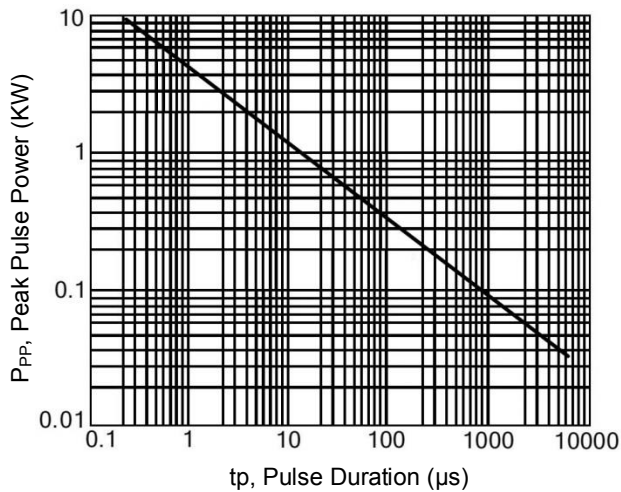
Derating Curve



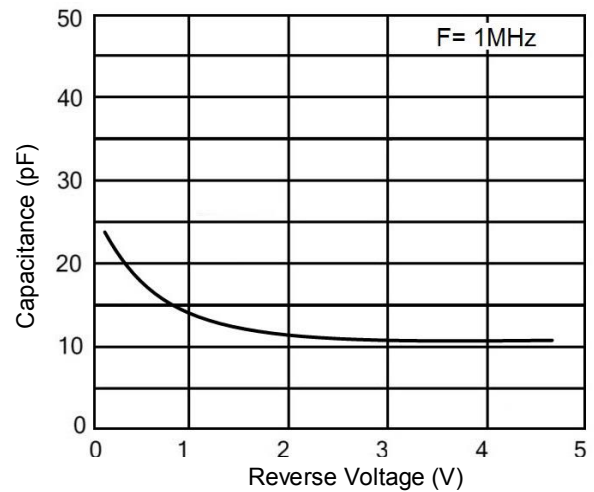
Pulse Waveforms



Non-Repetitive Peak Pulse vs. Pulse Time



Capacitance vs. Reverse Voltage



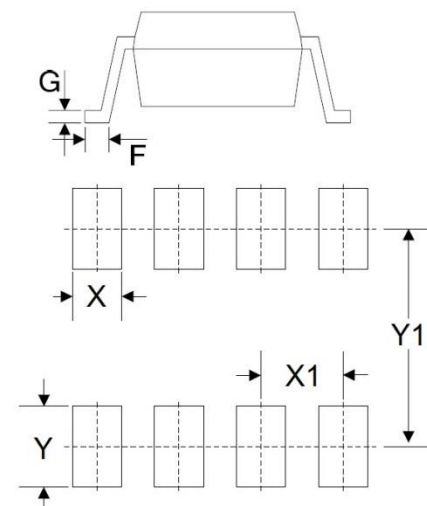
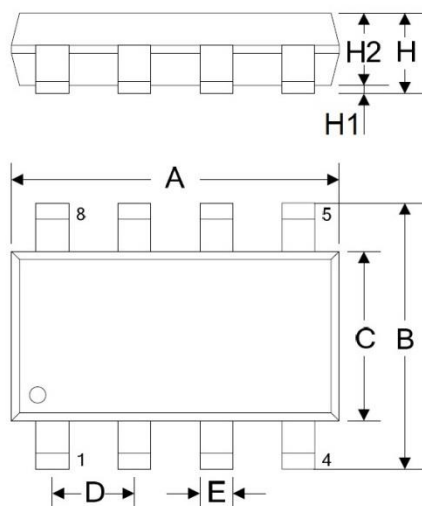
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

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.