

ESD Supressor

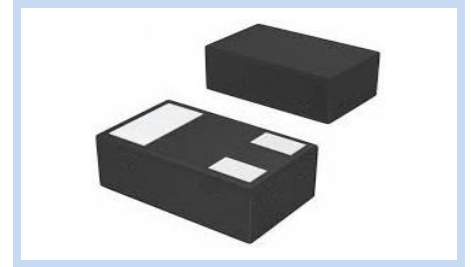
5V 2-Unidirectional DFN1006-3

ME52U10D02315

MERITEK

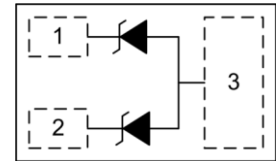
FEATURE

- IEC 61000-4-2 ESD: $\pm 15\text{KV}$ (Air) $\pm 8\text{KV}$ (Contact)
- IEC 61000-4-4 EFT: 20A (5/50ns)
- IEC 61000-4-5 Lightning: 2A (8/20 μs)
- ESD Protection for two Unidirectional Channels
- Low Leakage Current
- Low Clamping Voltage
- Solid-State Silicon-Avalanche Technology



APPLICATION

- Computer Interfaces Protection
- Microprocessors Protection
- Serial and Parallel Ports Protection
- Control Signal Lines Protection
- Power Lines on PCB Protection



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage per IEC61000-4-2 (Contact discharge)	V_{ESD}	± 8	KV
ESD Voltage per IEC61000-4-2 (Air discharge)		± 15	KV
Operating & Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

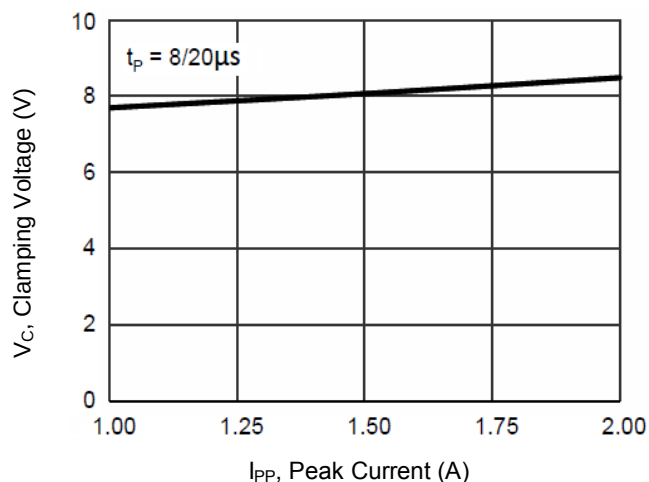
Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	5	V
Reverse Breakdown Voltage	$I_{\text{BR}}=1\text{mA}$	V_{BR}	6.2	--	7.2	V
Reverse Leakage Current	$V_{\text{R}}=5\text{V}$	I_{R}	--	--	0.5	μA
Clamping Voltage	$I_{\text{PP}}=1\text{A}, t_{\text{p}}=8/20\mu\text{s}$	V_{C}	--	--	9	V
	$I_{\text{PP}}=2\text{A}, t_{\text{p}}=8/20\mu\text{s}$		--	--	10	
Off State Junction Capacitance	$V_{\text{dc}}=0, f=1\text{MHz}$	C_{J}	--	--	15	pF

Notes:

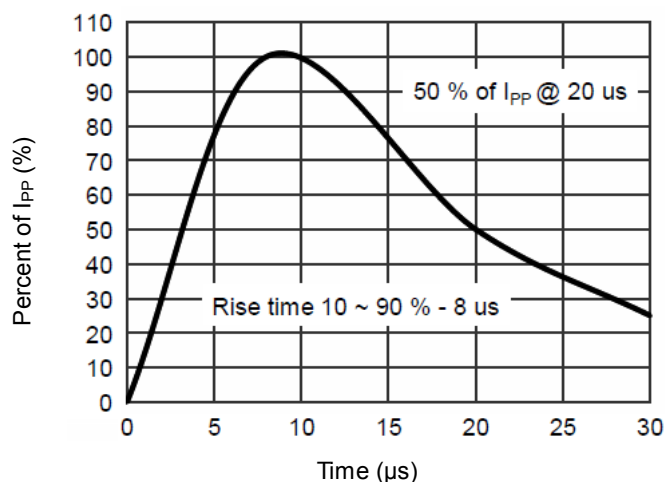
1. $T_J = 25^{\circ}\text{C}$ unless otherwise specified

CHARACTERISTIC CURVES

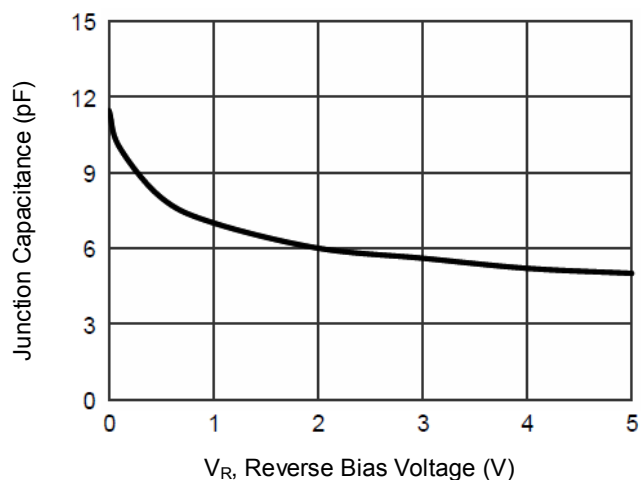
Typical Peak Clamping Voltage



Pulse Waveform



Typical Junction Capacitance



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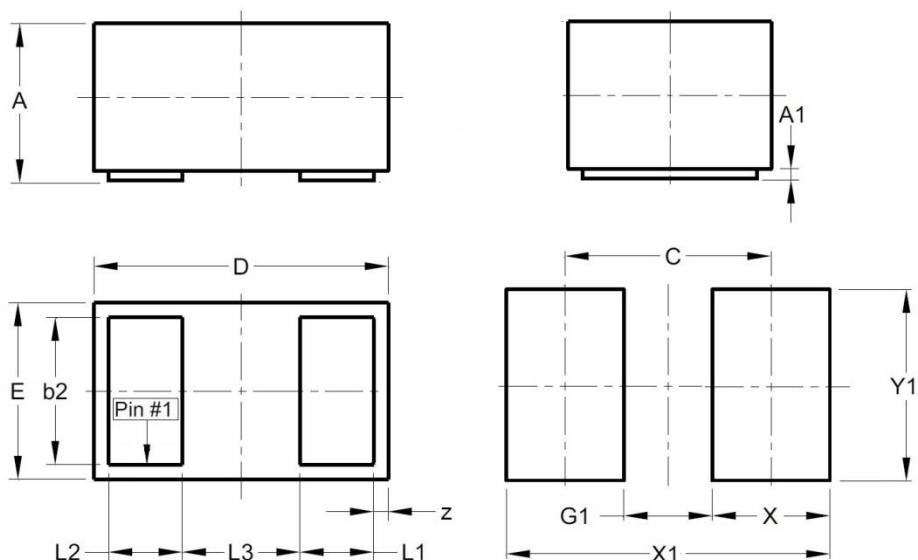
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DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.45	0.55
A1	-	0.05
b2	0.45	0.55
D	0.95	1.05
E	0.55	0.65
z	0.10	0.10
L1	0.20	0.30
L2	0.20	0.30
L3	0.40	0.40
C	0.70	0.70
G1	0.30	0.30
X	0.40	0.40
X1	1.10	1.10
Y1	0.60	0.60



*Specifications subject to change without notice.