

ESD Suppressor 7V Bidirectional DFN1006

ME71B12D02

MERITEK

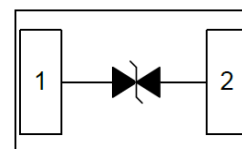
FEATURE

- IEC 61000-4-2 ESD: $\pm 30\text{KV}$ (Air) $\pm 30\text{KV}$ (Contact)
- IEC 61000-4-4 EFT: 40A (5/50ns)
- IEC 61000-4-5 Lightning: 5A (8/20 μs)
- ESD Protection for one Bidirectional Channel
- Low Capacitance
- Low Clamping Voltage
- Solid-State Silicon-Avalanche Technology



APPLICATION

- Mobile Phones
- Hand Held Portable Applications
- Computer Interfaces Protection
- Microprocessors Protection
- Serial and Parallel Ports Protection



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage per IEC61000-4-2 (Contact discharge)	V_{ESD}	± 30	KV
ESD Voltage per IEC61000-4-2 (Air discharge)		± 30	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}	--	--	7	V
Reverse Breakdown Voltage	$I_{\text{BR}}=1\text{mA}$	V_{BR}	7.5	--	10	V
Reverse Leakage Current	$V_{\text{R}}=7\text{V}$	I_{R}	--	--	1	μA
Clamping Voltage	$I_{\text{PP}}=1\text{A}, t_{\text{p}}=8/20\mu\text{s}$	V_{C}	--	--	12	V
	$I_{\text{PP}}=5\text{A}, t_{\text{p}}=8/20\mu\text{s}$		--	--	15	
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

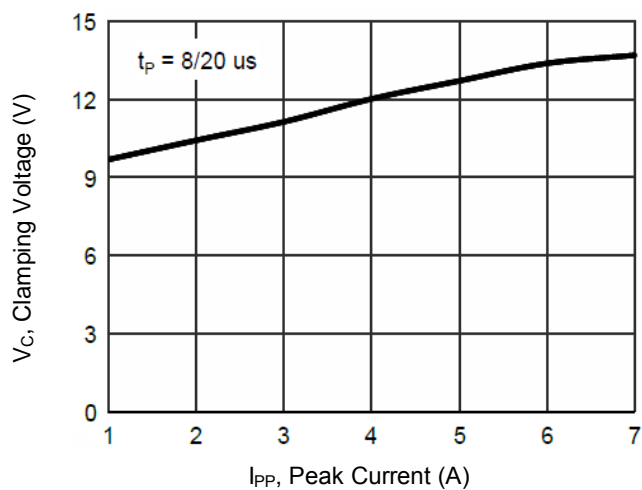
ESD Suppressor 7V Bidirectional DFN1006

ME71B12D02

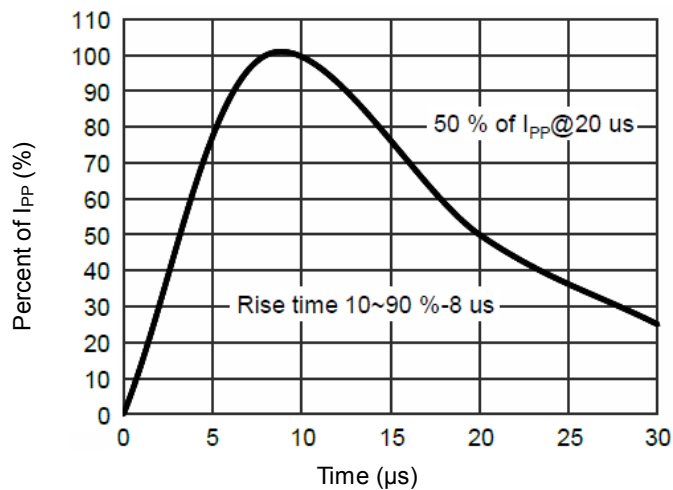
MERITEK

CHARACTERISTIC CURVES

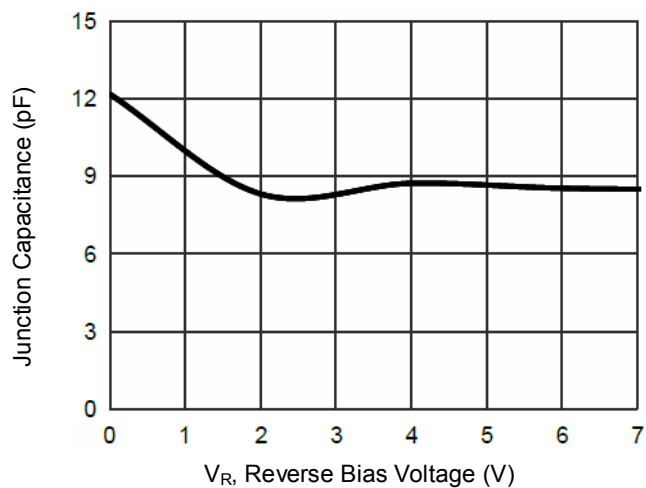
Typical Peak Clamping Voltage



Pulse Waveform



Typical Junction Capacitance



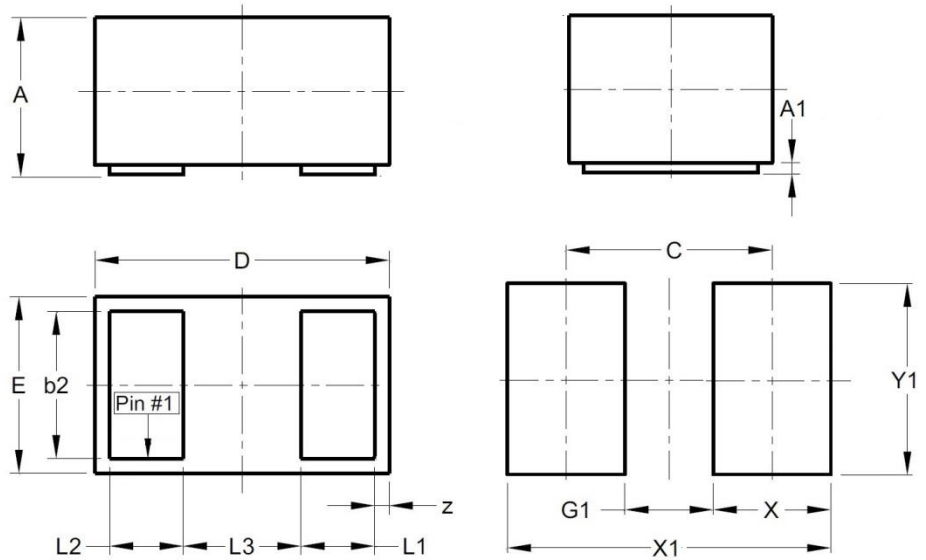
ESD Suppressor 7V Bidirectional DFN1006

ME71B12D02

MERITEK

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.