

ESD Suppressor

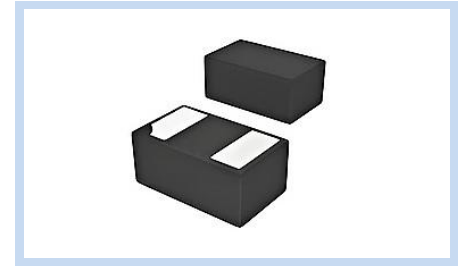
3.3V Bidirectional DFN1006

MEP3V31B7A0D02

MERITEK

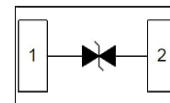
FEATURE

- IEC61000-4-2 (ESD): $\pm 30\text{KV}$ (Air), $\pm 30\text{KV}$ (Contact)
- IEC61000-4-4 (EFT): 40A(5/50ns)
- ESD Protection for One Bidirectional Channel
- Low Clamping Voltage and Low Leakage Current
- Application: High Speed Data Lines, Power Lines, Computers And Peripherals, Cellular Handsets



MECHANICAL DATA

- Case: DFN1006, Molded Epoxy Meets UL94V-0
- Terminals: Solderable per MIL-STD-750, Method 2026



ABSOLUTE MAXIMUM RATINGS

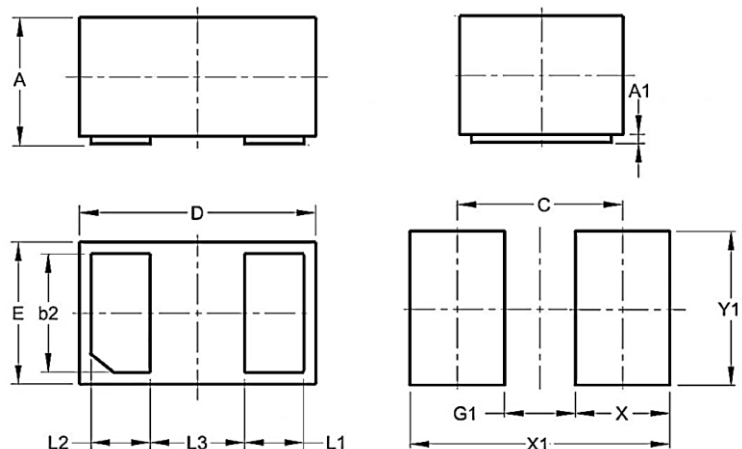
Parameter	Symbol	Value	Unit
ESD Discharge (IEC61000-4-2)	Air	± 30	KV
	Contact	± 30	
Peak Pulse Power (tp = 8/20 μ s waveform)	P _{PP}	84	W
Operating Junction Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Parameter, T _J = 25°C	Conditions	Symbol	Min	Typ.	Max	Unit
Reverse Stand-Off Voltage	--	V _{RWM}	-	-	3.3	V
Reverse Breakdown Voltage	I _{BR} =1mA	V _{BR}	3.6	-	-	V
Reverse Leakage Current	V _R =3.3V	I _R	-	-	0.5	μ A
Clamping Voltage	I _{PP} =1A, tp=8/20 μ s	V _C	-	-	6	V
	I _{PP} =7A, tp=8/20 μ s		-	-	12	
Junction Capacitance	V _R =0V, f=1MHz	C _J	-	12	-	pF

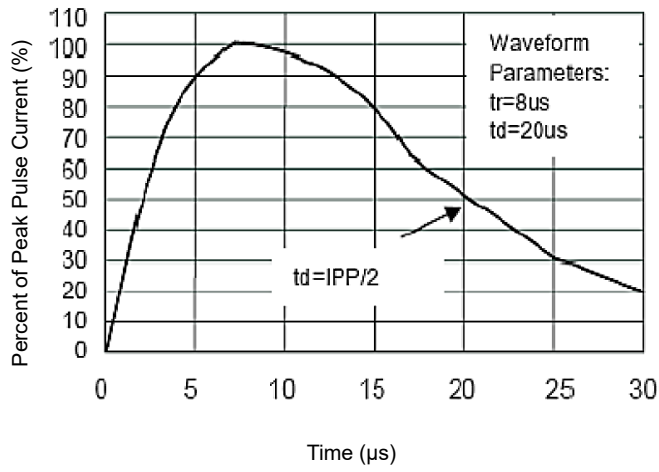
DIMENSIONS

Item	Min (mm)	Max (mm)
A	0.35	0.55
A1	0.00	0.05
b2	0.45	0.55
D	0.95	1.05
E	0.55	0.65
L1	0.20	0.30
L2	0.20	0.30
L3	0.35	0.45
C	0.80	
G1	0.30	
X	0.50	
X1	1.30	
Y1	0.60	



CHARACTERISTIC CURVES

8/20 μ s Pulse Waveform



Power Derating Curve

