PESD12VV1BL

BIDIRECTIONAL TVS DIODE

Features

- Protects one data or power line
- Ultra low leakage: nA level
- Operating voltage: 12V
- Low clamping voltage

  Complies with following standards:

  – IEC 61000-4-2 (ESD) immunity test

  Air discharge: ±30kV

  Contact discharge: ±30kV

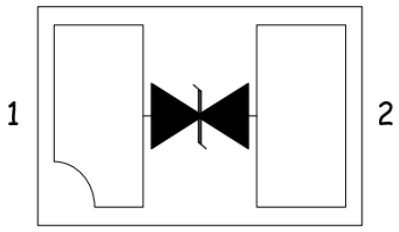
  – IEC61000-4-5 (Lightning) 8A (8/20μs)
- RoHS Compliant

Dimensions DFN1006

Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players

Pin Configuration



Mechanical Characteristics

- Package: DFN1006
- Case Material: “Green” Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Absolute Maximum Ratings(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	150	W
ESD per IEC 61000−4−2 (Air)	V_{ESD}	± 30	Kv
ESD per IEC 61000−4−2 (Contact)		± 30	
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STJ}	-55 to +150	℃

Electrical Characteristics(TA=25°C unless otherwise specified)

Part Number	Device Marking	V_{RWM} (V)	V_{BR} (V)	I_T (mA)	V_C @1A	Vc		I_R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
PESD12VV1BL	AF	12	14	1	-	19	8	0.2	8

Typical Performance Characteristics (TA=25°C unless otherwise Specified)

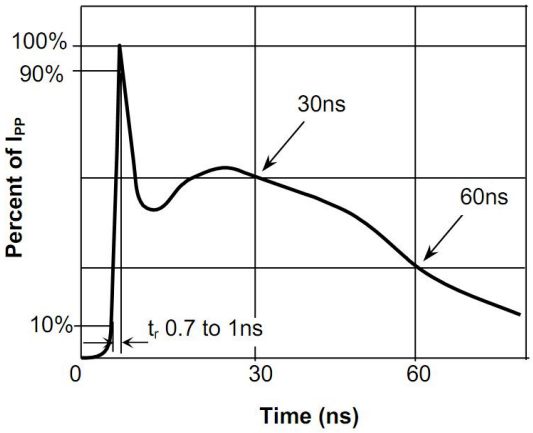


Fig.1 Pulse Waveform-ESD(IEC61000-4-2)

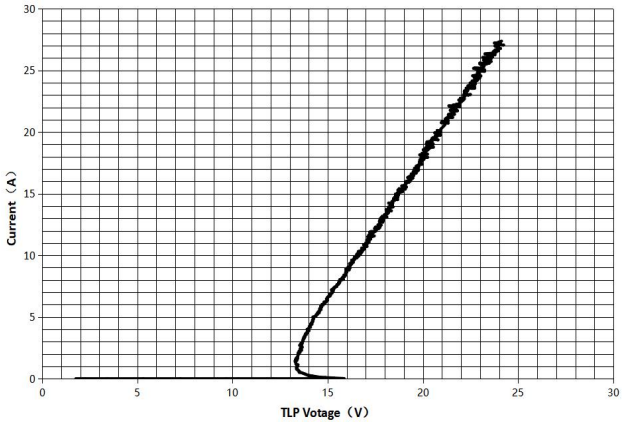


Fig.2 Transmission Line Pulse (TLP)

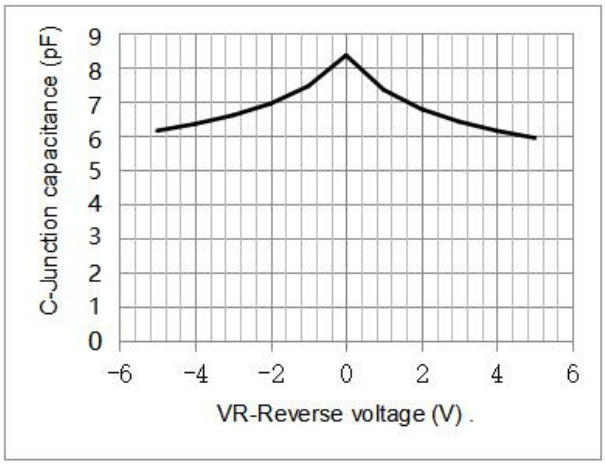


Fig.3Capacitance vs. Reveres voltage

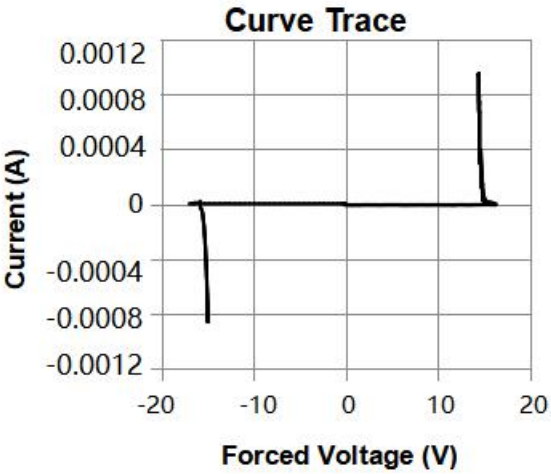
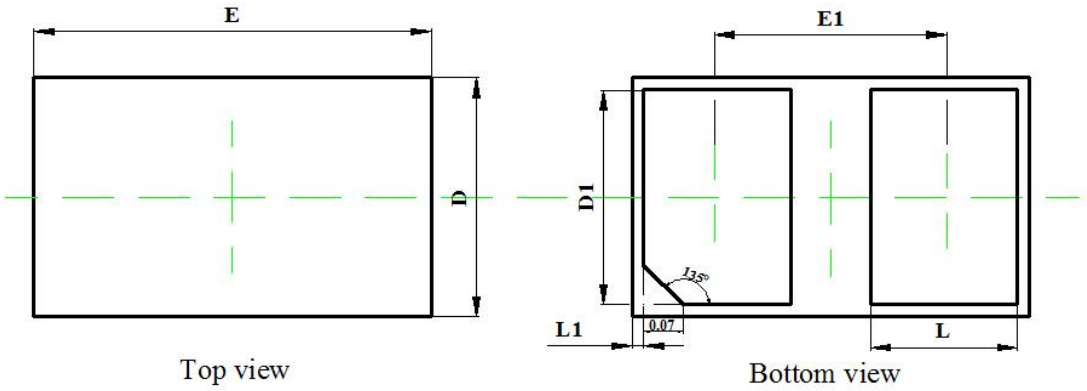


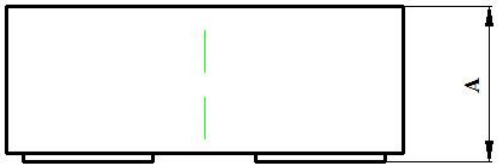
Fig.4 IV Curve（ forward voltage）

DFN1006 PACKAGE OUTLINE & DIMENSIONS



Top view

Bottom view



Side view

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
L1	0.000	0.100	0.000	0.004

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