

## Features

- Ultra small package: 1.0x0.6x0.5mm
- Ultra low capacitance: 15pF typical
- Ultra low leakage: nA level
- Low operating voltage:  $\pm 5V$
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
  - – IEC 61000-4-2 (ESD) immunity test  
Air discharge:  $\pm 30kV$   
Contact discharge:  $\pm 30kV$
  - – IEC61000-4-5 (Lightning)8A (8/20 $\mu s$ )
- RoHS Compliant
- Lead Finish: NiPdAu

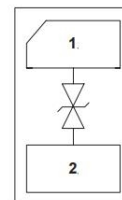
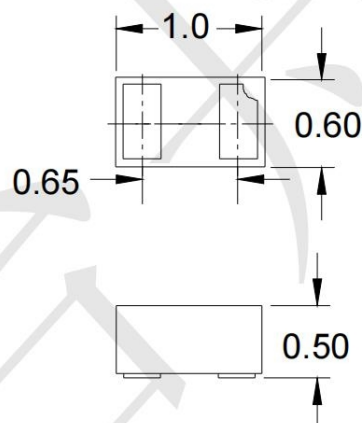
## Mechanical Characteristics

- Package: DFN1006-2 (0402)
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Shipping Qty : 10000pcs/7Inch Tape & Reel

## Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

## Dimensions and Pin Configuration



**Marking: B1 Or B2**

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	80	W
Peak Pulse Current (8/20μs)	Ipp	8	A
ESD per IEC 61000-4-2 (Air)	VESD	±25	kV
ESD per IEC 61000-4-2 (Contact)		±25	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	
Breakdown Voltage	VBR	5.6		8.4	V	IT = 1mA
Reverse Leakage Current	IR			0.08	uA	VRWM = 5V
Clamping Voltage	VC			6	V	Ipp=1A(8x 20us pulse)
Clamping Voltage	VC			10	V	Ipp=8A(8x 20us pulse)
Junction Capacitance	CJ		15		pF	VR = 0V, f = 1MHz

**Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)**

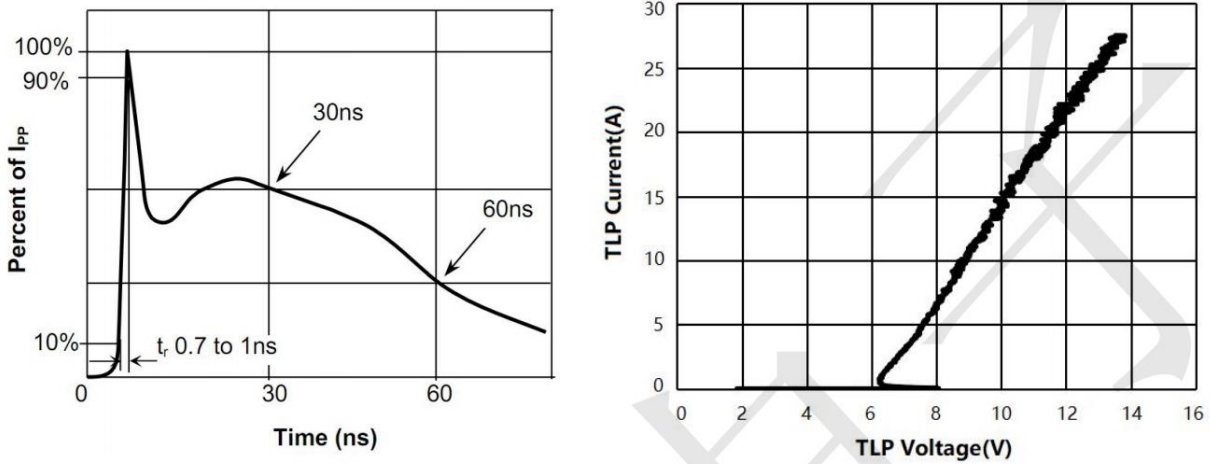
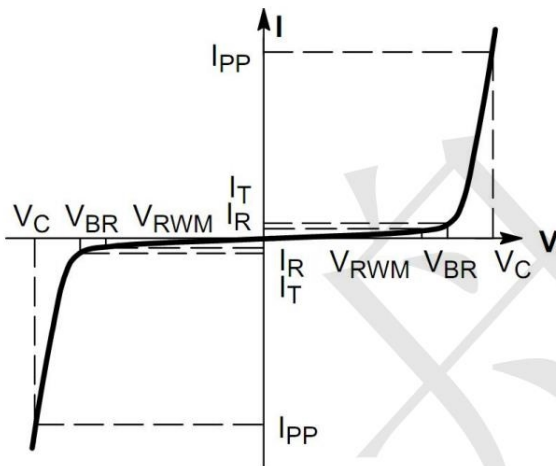
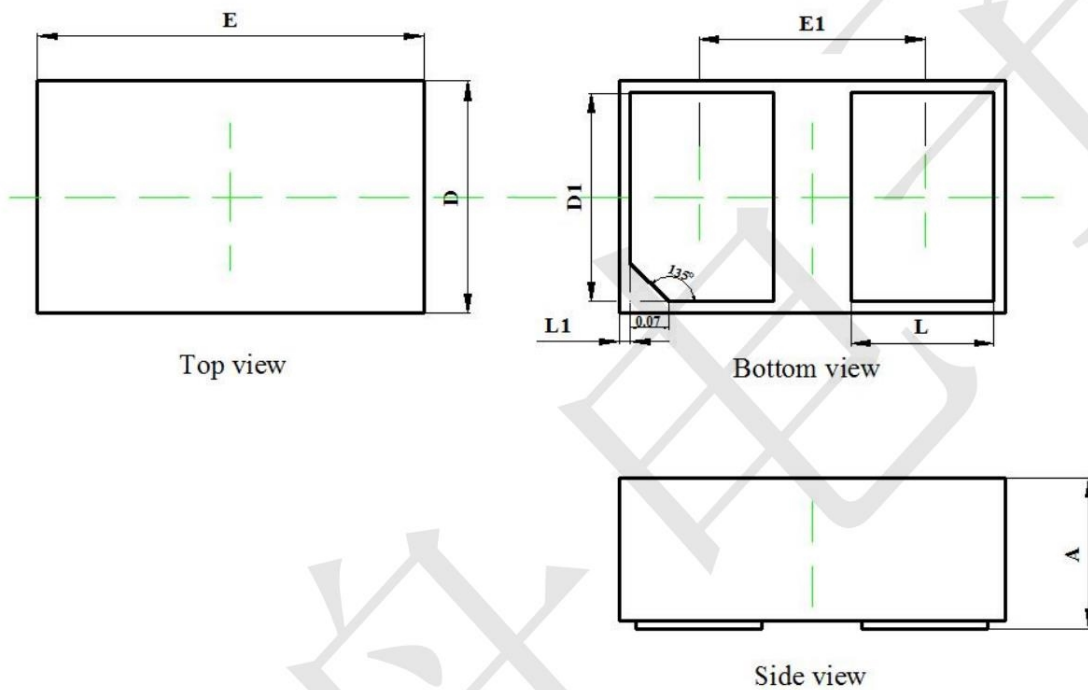


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)



**DFN1006-2 Package Outline Drawing (0402)**

DFN1006 Package Outline



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

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