

## Features

- Ultra small package: 1.0x0.6x0.5mm
- Very low capacitance: 0.35pF typical
- Ultra low leakage: nA level
- Low operating voltage:  $\pm 5V$
- Low clamping voltage
- 3-pin leadless package
- Up to 2-line protects
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test  
Air discharge:  $\pm 15kV$   
Contact discharge:  $\pm 8kV$
  - IEC61000-4-4 (EFT) 40A (5/50ns)
- RoHS Compliant

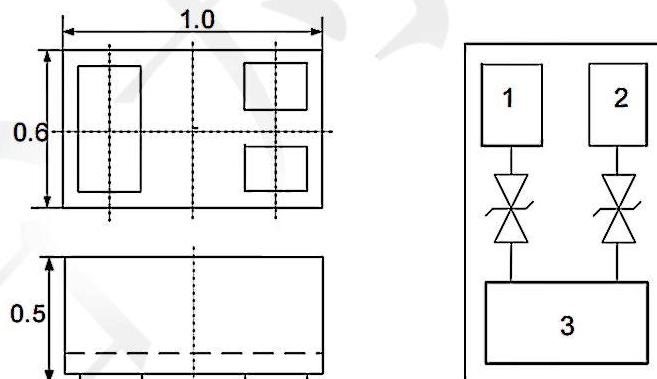
## Mechanical Characteristics

- Package: DFN1006-3 (1.0x0.6x0.5mm)
- Lead Finish: NiPdAu
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Shipping Qty : 10000pcs/7Inch Tape & Reel

## Applications

- Cellular Handsets & Accessories
- Digital Visual Interface (DVI)
- Display Port
- MDDI Ports
- USB Ports
- PCI Express
- Serial ATA

## Dimensions and Pin Configuration

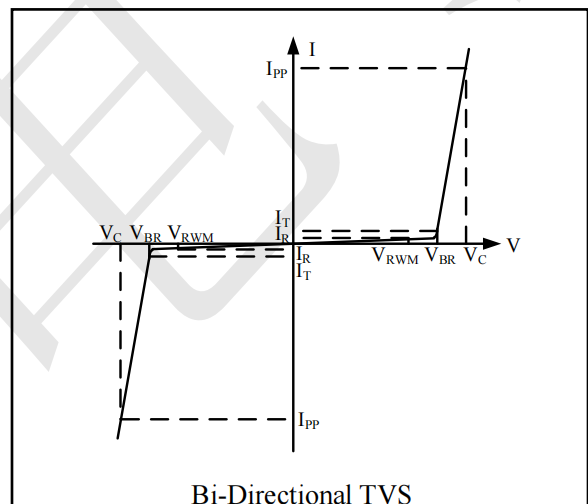


**Absolute Maximum Ratings** (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	VESD	±15	kV
ESD per IEC 61000-4-2 (Contact)		±8	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

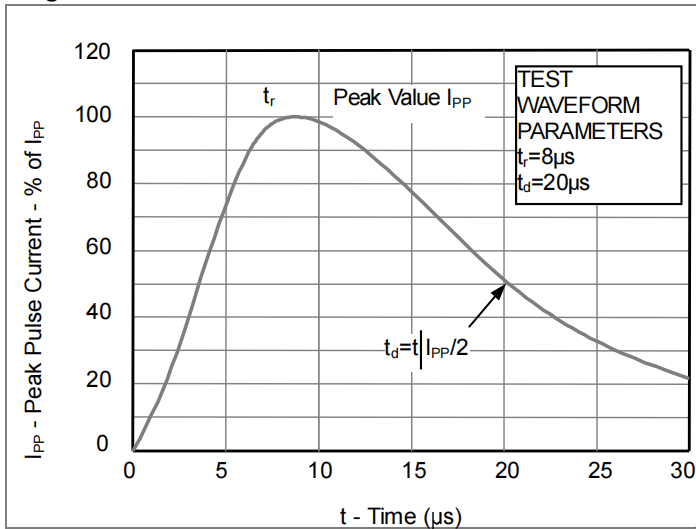
Symbol	Parameter
$V_{RWM}$	Nominal Reverse Working Voltage
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Reverse Breakdown Voltage @ $I_T$
$I_T$	Test Current for Reverse Breakdown
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Maximum Peak Pulse Current
$C_{ESD}$	Parasitic Capacitance
$V_R$	Reverse Voltage
f	Small Signal Frequency



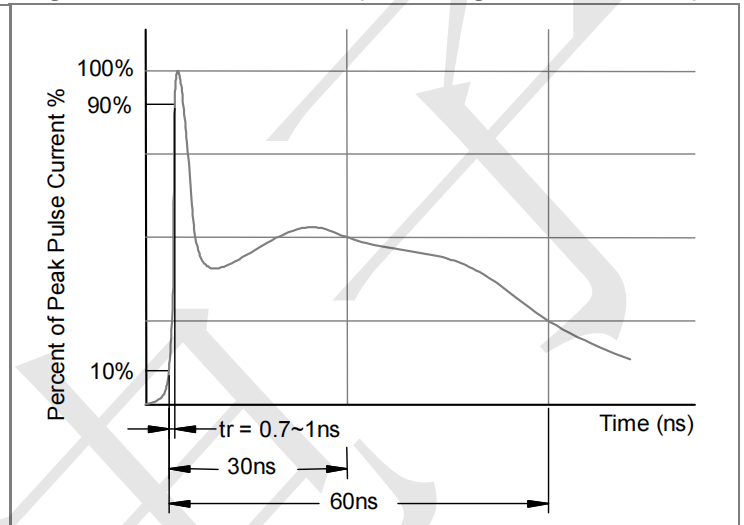
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	$V_{RWM}$			5	V	Pin 1 or pin 2 to pin 3 and between pin 1 and pin 2
Breakdown Voltage	$V_{BR}$	6		9	V	$I_T = 1\text{mA}$ , pin 1 or pin 2 to pin 3 and between pin 1 and pin 2
Reverse Leakage Current	$I_R$			0.06	$\mu\text{A}$	$V_{RWM} = 5\text{V}$ , pin 1 or pin 2 to pin 3 and between pin 1 and pin 2
Clamping Voltage	$V_C$			10	V	$I_{PP} = 2\text{A}$ (8 x 20 $\mu\text{s}$ pulse), pin 1 to pin 3 or pin 2 to pin 3
Junction Capacitance	$C_J$		0.6		pF	$V_R = 0\text{V}$ , f = 1MHz, pin 1 or pin 2 to pin 3
Junction Capacitance	$C_J$		0.35		pF	$V_R = 0\text{V}$ , f = 1MHz, pin 1 to pin 2

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

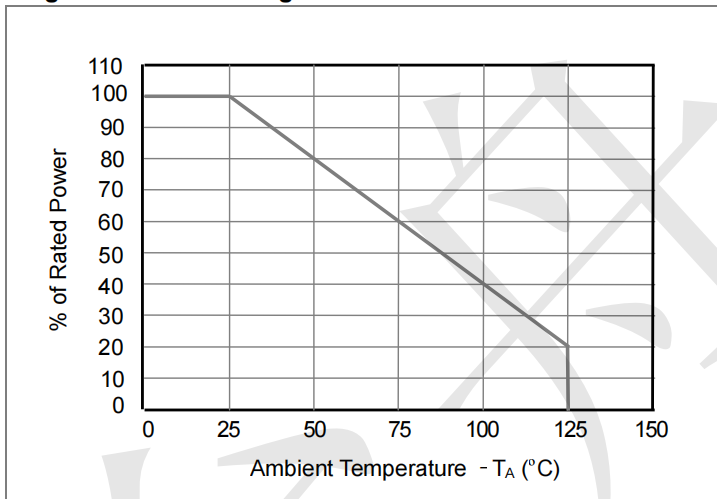
**Fig1. 8/20 $\mu\text{s}$  Pulse Waveform**



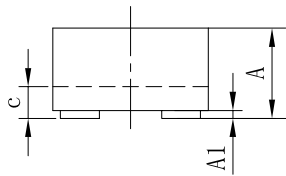
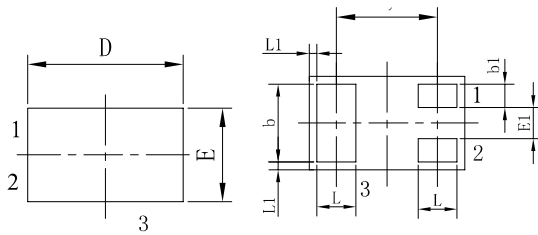
**Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)**



**Fig3. Power Derating Curve**

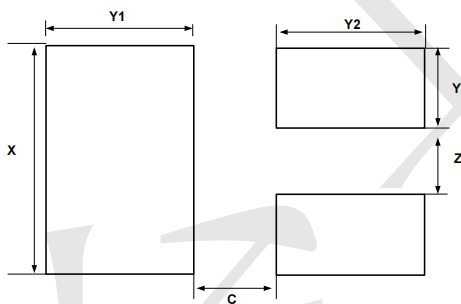


### Outline Drawing - DFN1006-3



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
b1	0.10	0.15	0.20	0.004	0.006	0.008
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65 BSC			0.026 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
E1	0.15	0.20	0.25	0.006	0.008	0.010
L	0.20	0.25	0.30	0.008	0.010	0.012
L1	0.05 REF			0.0002 REF		

### Land Pattern -DFN1006-3



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	0.25	0.010
X	0.65	0.024
Y1	0.50	0.020
Y2	0.50	0.020
Y3	0.25	0.010
Z	0.20	0.008

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:*

*Click to view products by [TECH PUBLIC](#) manufacturer:*

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE8.2A](#) [JANTX1N6053A](#) [SA60CA](#) [SA64CA](#)  
[SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ6.5A](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD112-B1-02EL E6327](#) [ESD7451N2T5G](#) [19180-510](#)  
[CPDT-5V0USP-HF](#) [3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [JANTX1N6126A](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#)  
[SCM1293A-04SO](#) [ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [CEN955 W/DATA](#) [VESD12A1A-HD1-GS08](#) [CPDQC5V0-HF](#) [D1213A-01LP4-7B](#)  
[ESD101-B1-02EL E6327](#) [AOZ8808DI-03](#) [5KP15A](#) [5KP48A](#) [5KP90A](#) [ESD3V3D7-TP](#) [15KPA36A-LF](#) [P4KE56CA](#) [P4KE68A](#)  
[P4KE91CATR](#) [P6KE120A](#) [P6KE13CA](#) [P6KE43CA](#) [P6KE6.8CA](#) [P6KE8.2](#) [P6SMBJ20CA](#) [JANTX1N6072A](#) [SR2835ESKG](#)