



## Features

- Operating voltage: 5V
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 30\text{kV}$
    - Contact discharge:  $\pm 30\text{kV}$
  - IEC61000-4-4 (EFT) 40A (5/50ns)
- RoHS Compliant

## Mechanical Characteristics

- Package: DFN1006-2
- Lead Finish: Matte Tin
- UL Flammability Classification Rating 94V-0
- Pb-Free, Halogen Free, RoHS/WEEE Compliant



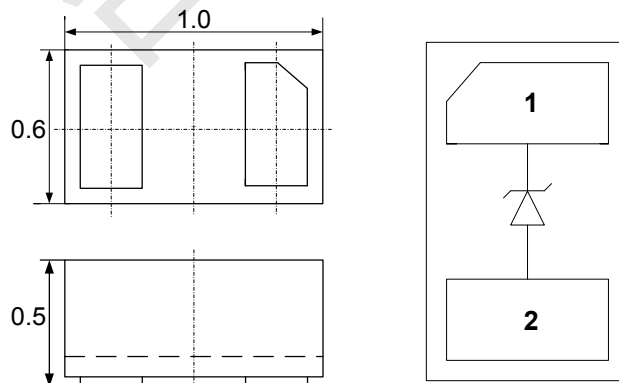
## Applications

- l Cellular phones audio
- l MP3 players
- l Digital cameras
- l Portable applications
- l mobile telephone

## Ordering Information

Part Number	Qty per Reel	Reel Size
TPSP1003-01ETG	5000	7"

## Dimensions and Pin Configuration



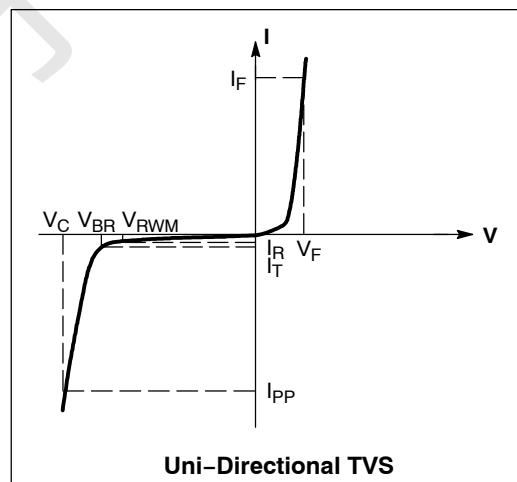


**Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$  unless otherwise specified)**

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		$\pm 30$ $\pm 30$	kV kV
Total Power Dissipation on FR-5 Board (Note 1) @ $T_A=25^\circ\text{C}$	PD	150	mW
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	$^\circ\text{C}$
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	$^\circ\text{C}$

**Electrical Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise specified)**

Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$
$P_{pk}$	Peak Power Dissipation
C	Capacitance @ $V_R = 0$ and $f = 1.0$ MHz

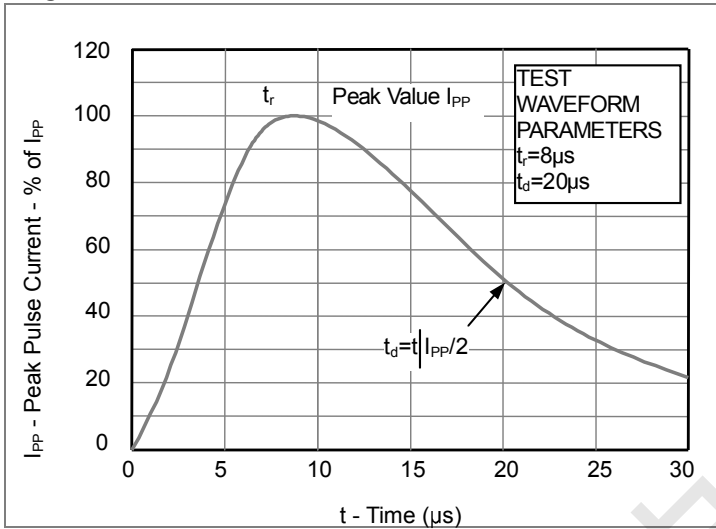


Device	$V_{RWM}$ (V)	$I_R$ ( $\mu\text{A}$ ) @ $V_{RWM}$	$V_{BR}$ (V) @ $I_T$ (Note 2)	$I_T$ (mA)	$I_{PP}$ (A) (Note 3)	$V_C$ (V) @ Max $I_{PP}$ (Note 3)	$P_{PK}$ (W) (8*20 $\mu\text{s}$ )	C (pF)
	Max	Max	Min		Max	Max	Typ	Typ
TPSP1003-01ETG	5.0	0.2	6.2	1.0	8.5	12.3	100	75

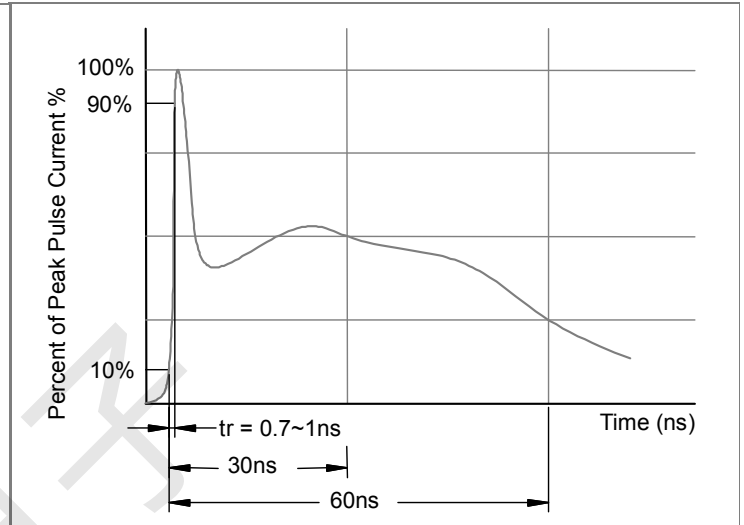


**PROTECTION PRODUCTS**  
Typical characteristics

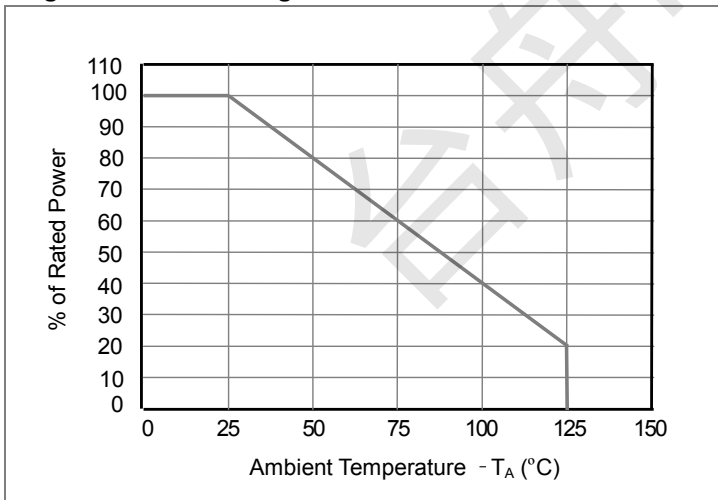
**Fig1. 8/20 $\mu$ s Pulse Waveform**



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

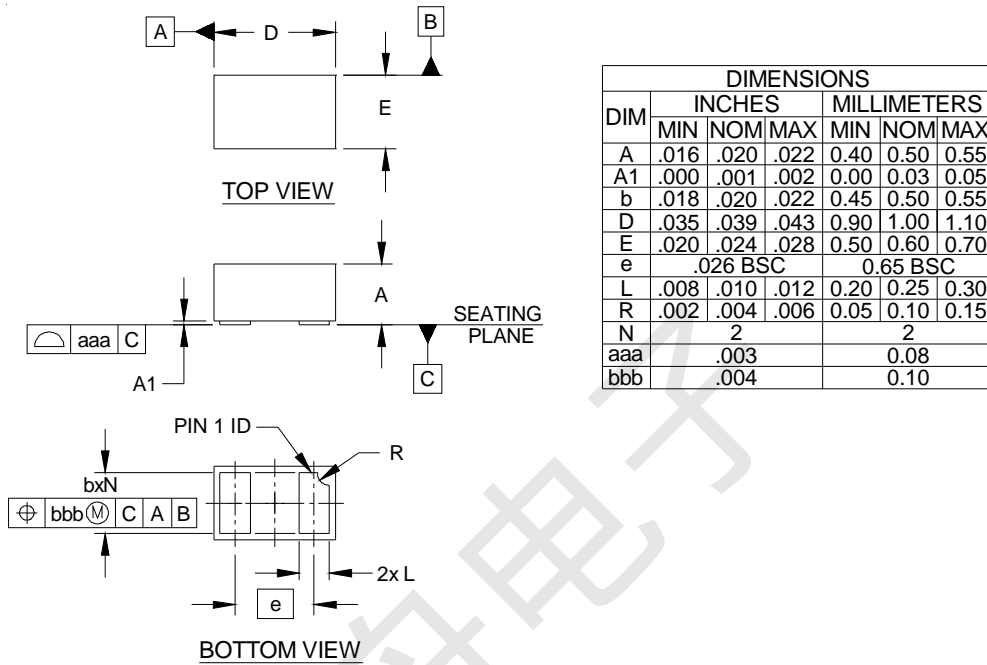


**Fig3. Power Derating Curve**





## Outline Drawing - DFN1006-2



## Land Pattern - DFN1006-2

