



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



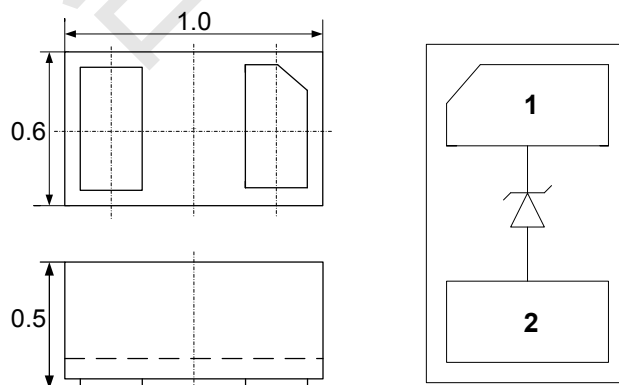
Applications

- 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



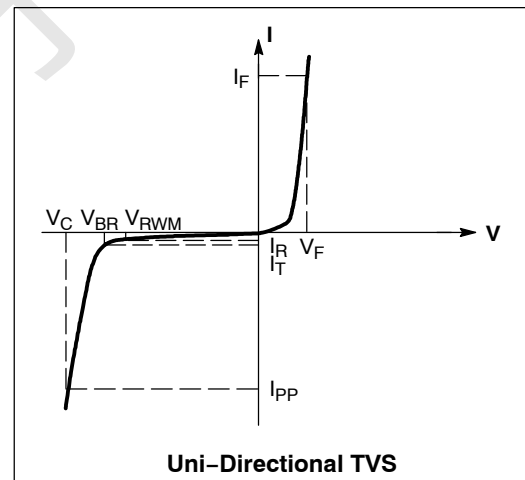


Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		± 30 ± 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 (μA) @ 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 μs)	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 μ s Pulse Waveform

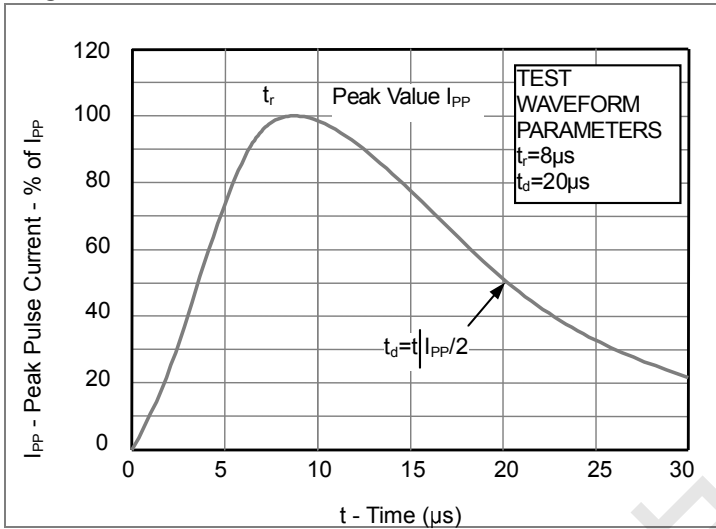


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

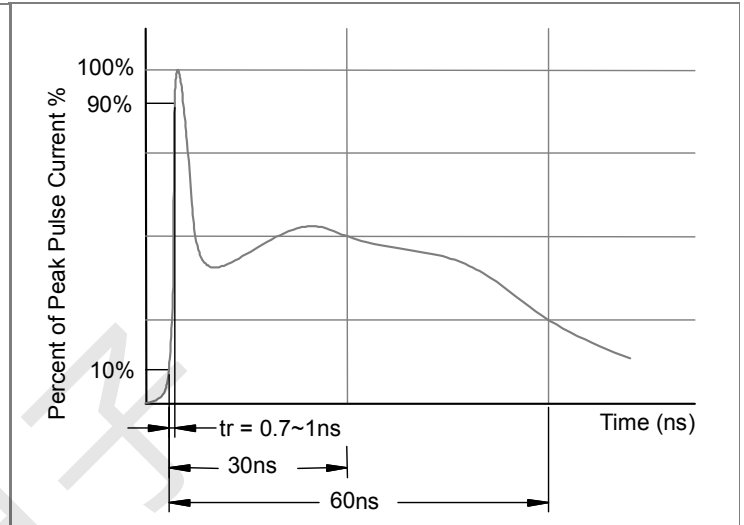
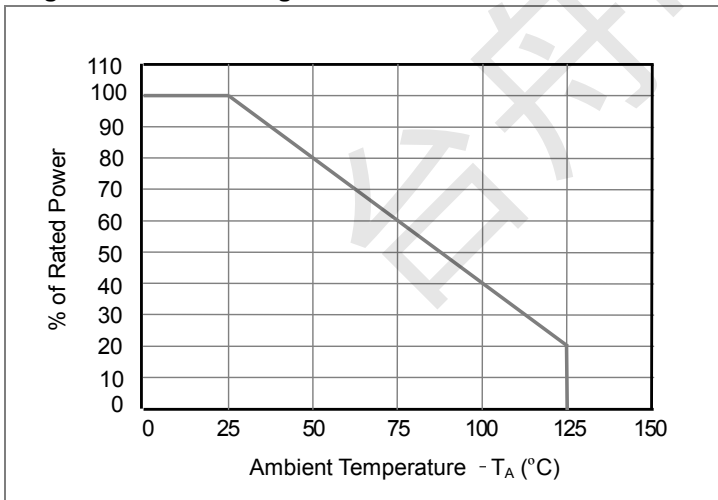
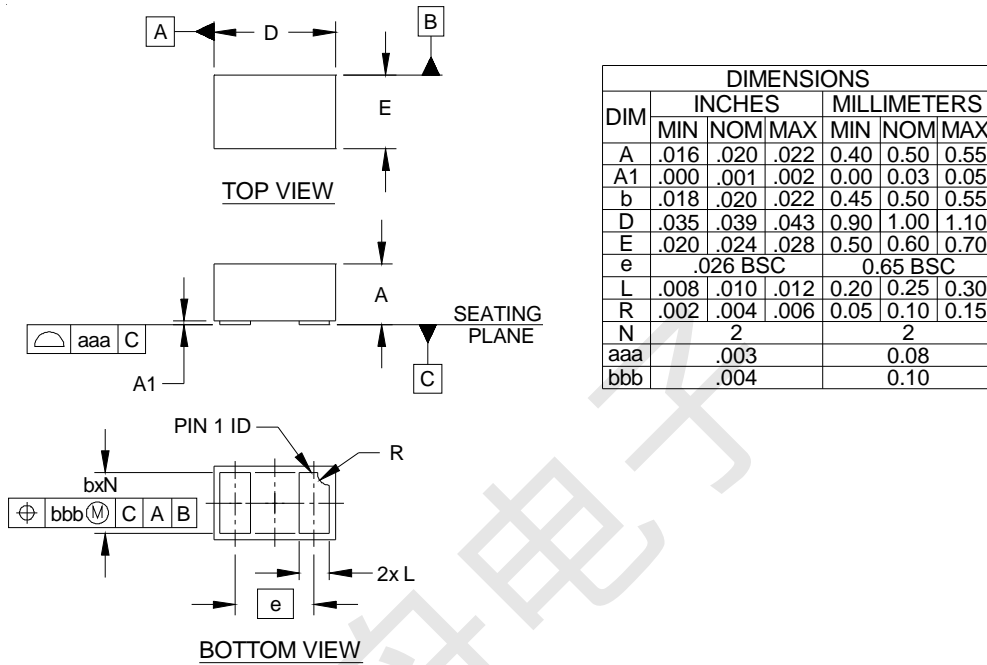


Fig3. Power Derating Curve





Outline Drawing - DFN1006-2



Land Pattern - DFN1006-2

