

**Features**

- Ultra Low Capacitance
- Ultra Low Leakage
- Low Clamping Voltage
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings**

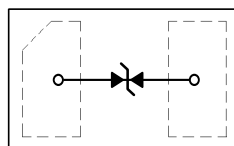
IEC61000-4-2(ESD)	Air	±20KV
	Contact	±15KV
Peak pulse power(tp=8/20us)	PPK	1 €W
Operating Junction Temperature Range	T <sub>J</sub>	-55°C to +125°C
Storage Temperature Range	T <sub>STG</sub>	-55°C to +150°C

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Marking Information**



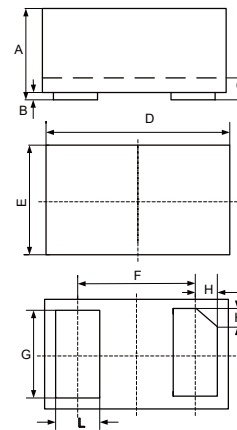
**Internal Structure**



**Transparent top view**

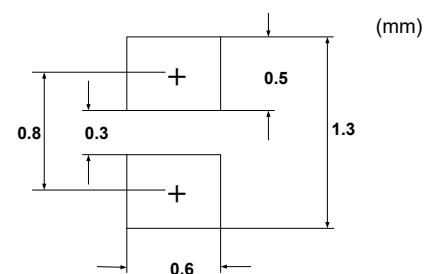
**ESD Protection Device**

**DFN1006-2**



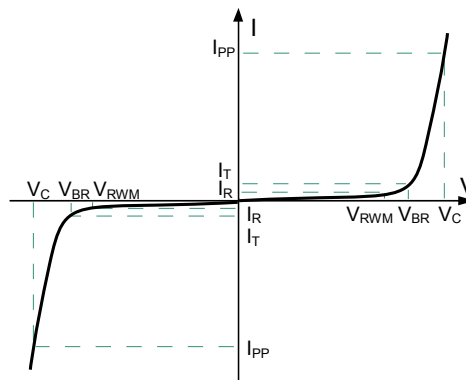
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
B	0.000	0.002	0.00	0.05	
C	0.005	0.007	0.12	0.18	
D	0.037	0.041	0.95	1.05	
E	0.022	0.026	0.55	0.65	
F	0.026		0.650		TYP.
G	0.018	0.022	0.45	0.55	
H	0.003	0.007	0.07	0.17	
L	0.008	0.012	0.20	0.30	

**SUGGESTED SOLDER PAD LAYOUT**



**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

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
C	Capacitance @ $V_R=0$ and $f=1\text{MHz}$



**Electrical Characteristics per line @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$	Pin 1 to Pin 2			16	V
		Pin 2 to Pin 1			10	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$ , Pin 1 to Pin 2	16.5			V
		$I_T = 1\text{mA}$ , Pin 2 to Pin 1	10.5			V
Reverse Leakage Current	$I_R$	$V_{RWM} = 16\text{V}$ , Pin 1 to Pin 2			0.5	$\mu\text{A}$
		$V_{RWM} = 10\text{V}$ , Pin 2 to Pin 1			0.5	$\mu\text{A}$
TLP Clamping Voltage	$V_C$	$I_{PP} = 8\text{A}$ , Pin 1 to Pin 2		32		V
TLP Clamping Voltage	$V_C$	$I_{PP} = 8\text{A}$ , Pin 2 to Pin 1		19		V
TLP Clamping Voltage	$V_C$	$I_{PP} = 16\text{A}$ , Pin 1 to Pin 2		33		V
TLP Clamping Voltage	$V_C$	$I_{PP} = 16\text{A}$ , Pin 2 to Pin 1		23		V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$		0.3		pF

## Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

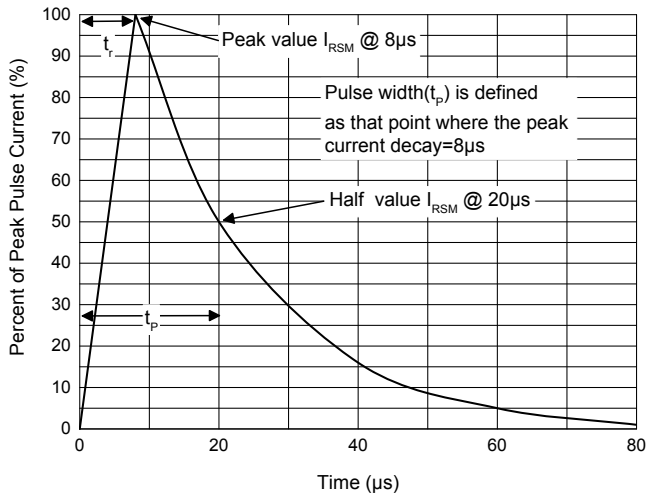


Fig. 2 - Non-Repetitive Peak Pulse Power

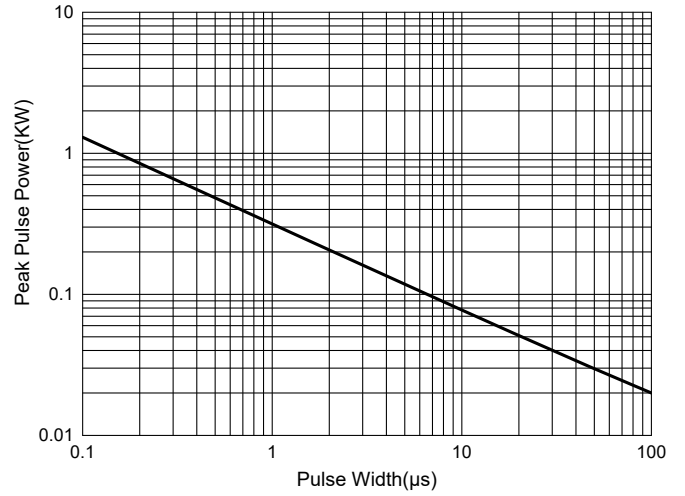


Fig. 3 - Capacitance Characteristics

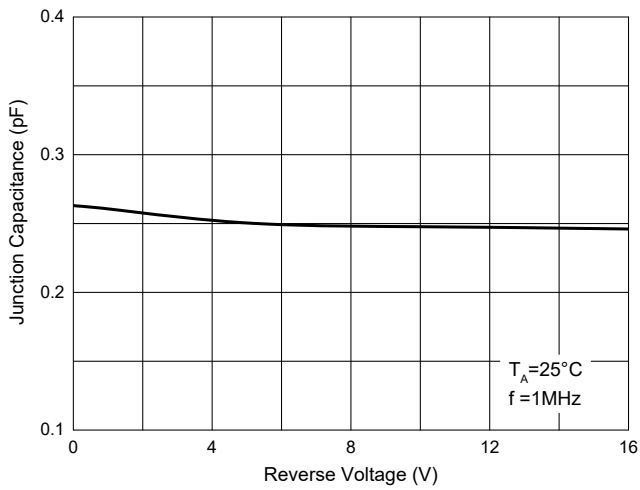


Fig. 4 - TLP Measurement

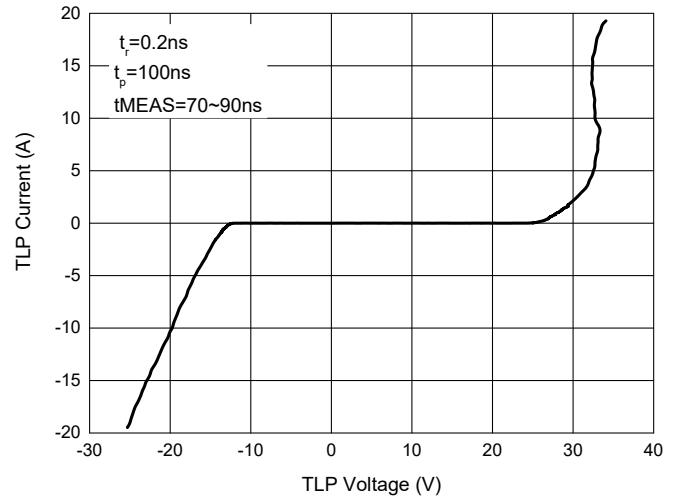
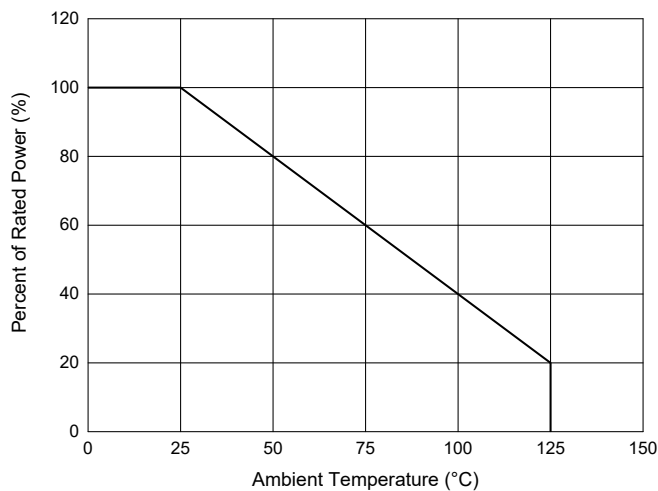


Fig. 5 - Pulse Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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