

**Features**

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

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

IEC61000-4-2(ESD)	Air Contact	±20KV ±20KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	3A
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	40W

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

**Internal Structure**

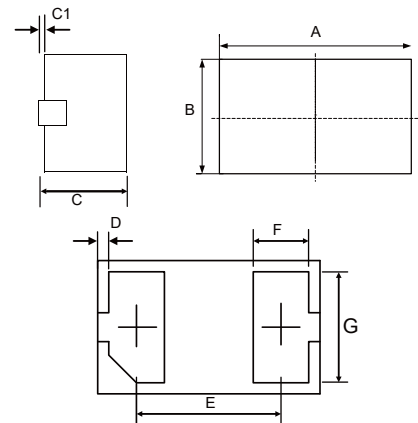


**Marking Code**



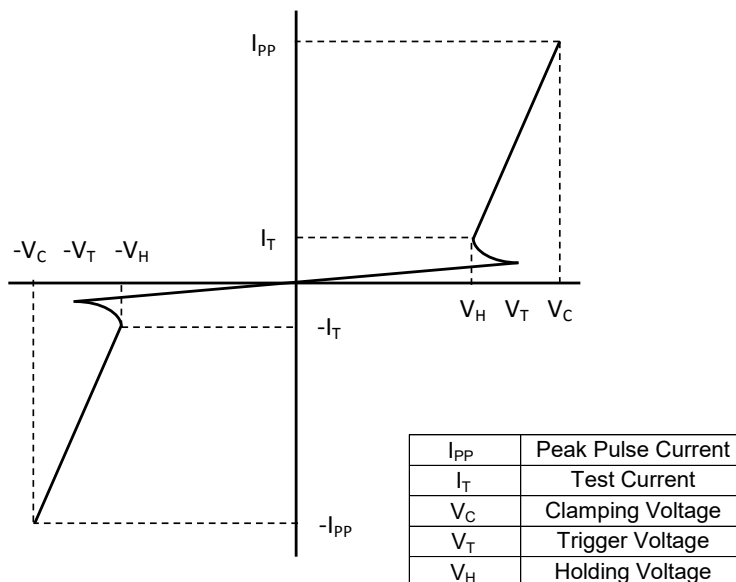
**ESD Protection Device**

**DFN1006-2L**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.001	0.003	0.02	0.08	
E	0.026		0.65		TYP.
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	

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



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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5.5	V
Trigger Voltage	$V_{TRIG}$	High Voltage than $V_{TRIG}$ Guarantees the Protection Turn-On	6.5			V
Holding Voltage	$V_H$	$I_H=1\text{mA}$ , Lower Voltage than $V_{TRIG}$ Guarantees the Protection Turn-Off	6.1	7	8.8	V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5.5\text{V}$			50	nA
Clamping Voltage	$V_C$	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$			13	V
Clamping Voltage	$V_C$	$I_{PP}=3\text{A}$ , $t_p=8/20\mu\text{s}$			15	V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$		0.15	0.2	pF

**Curve Characteristics**

Fig. 1 - 8 X 20µs Pulse Waveform

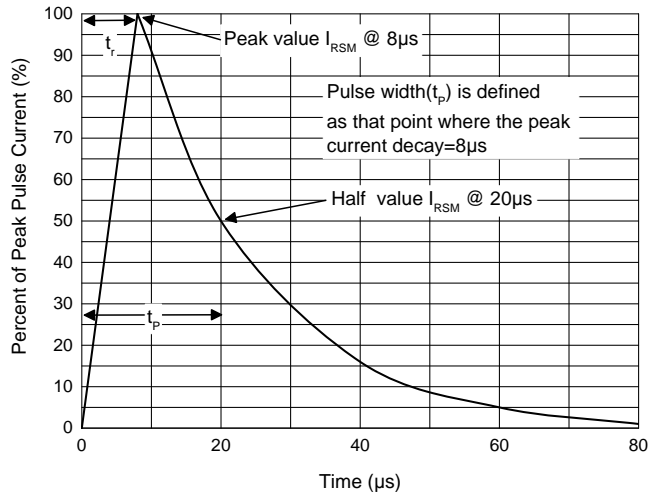


Fig. 2 - Non-Repetitive Peak Pulse Power

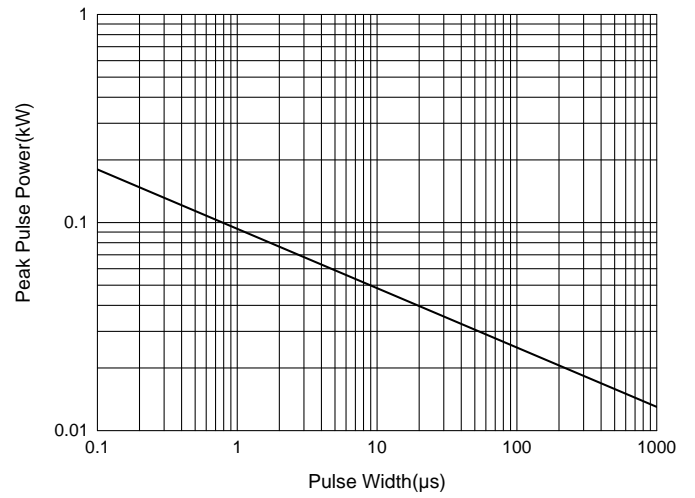


Fig. 3 - Power Derating Curve

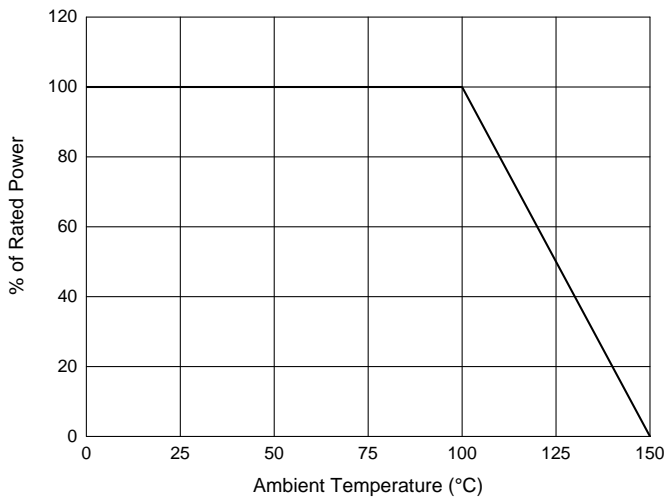


Fig. 4 - Clamping Voltage Characteristics

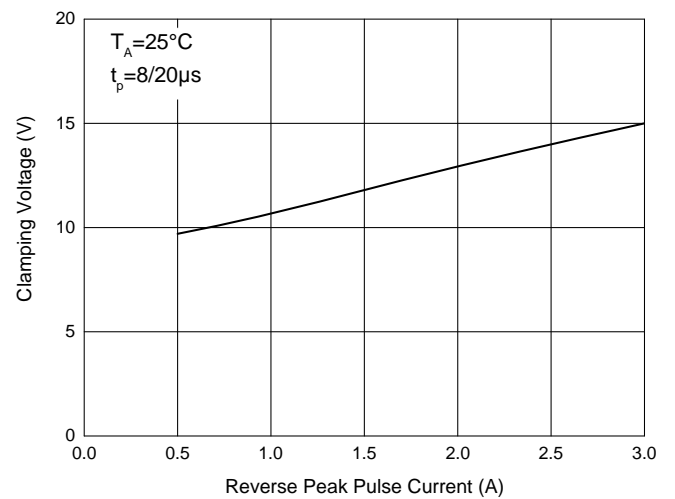
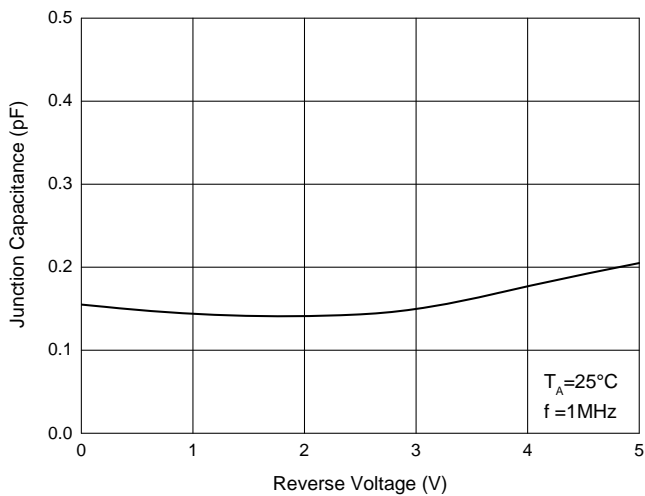


Fig. 5 - Capacitance Characteristics



## Ordering Information

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

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