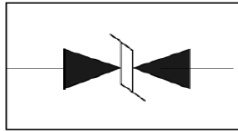


**DFN1006**

**Features**

- 550Watts peak pulse power( $t_p=8/20\mu s$ )
- Low clamping voltage
- Low leakage current
- Glass passivated junction
- Bidirectional configurations
- IEC 61000-4-2  $\pm 30KV$  contact  $\pm 30KV$  air
- Halogen free and RoHS compliant

**Mechanical Data**

- CASE: DFN1006 Molded Plastic
- Molding compound flammability rating: UL 94V-0
- Mounting Position:Any

**Making Code & Ordering information**

	<table border="1"> <thead> <tr> <th>Ordercode</th> <th>Package</th> <th>Base qty</th> <th>Deliverymode</th> </tr> </thead> <tbody> <tr> <td>PDF2V07C45</td> <td>DFN1006</td> <td>10000</td> <td>Tape and reel</td> </tr> </tbody> </table>	Ordercode	Package	Base qty	Deliverymode	PDF2V07C45	DFN1006	10000	Tape and reel
Ordercode	Package	Base qty	Deliverymode						
PDF2V07C45	DFN1006	10000	Tape and reel						

**Maximum Ratings & Thermal Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p = 8/20\mu s$ )	$P_{PP}$	550	Watts
Peak Pulse Current ( $t_p = 8/20\mu s$ )(note1)	$I_{pp}$	50	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	$V_{ESD}$	30 30	kV
Lead Soldering Temperature	$T_L$	260(10seconds)	°C
Junction Temperature	$T_J$	-55 to + 125	°C
Storage Temperature	$T_{stg}$	-55 to + 125	°C

**Electrical Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$				7.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	7.2	7.5		V
Reverse Leakage Current	$I_R$	$V_{RWM}=7V, T=25^\circ C$		0.1	0.5	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=50A, t_p=8/20\mu s$		11		V
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$		140		pF

## Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

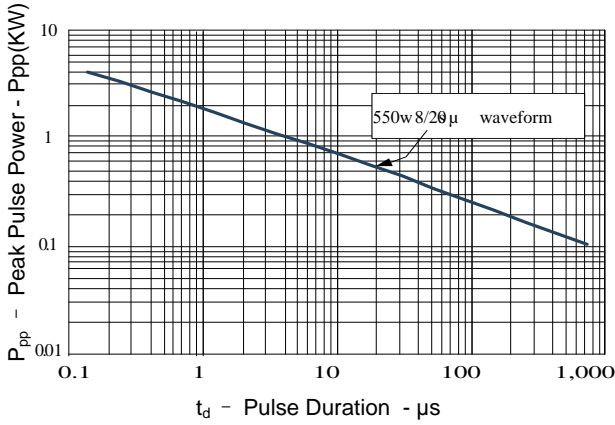


Figure 1: Peak Pulse Power vs. Pulse Time

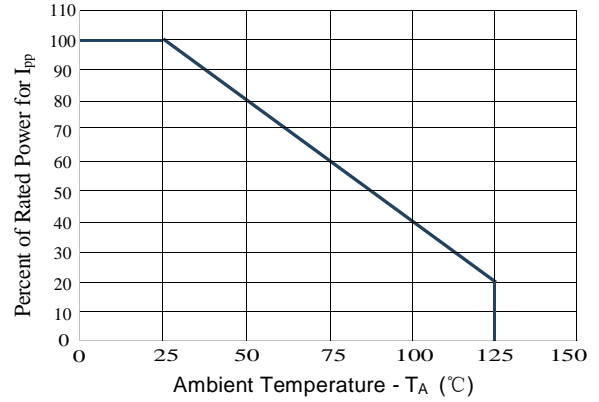


Figure 2: Power Derating Curve

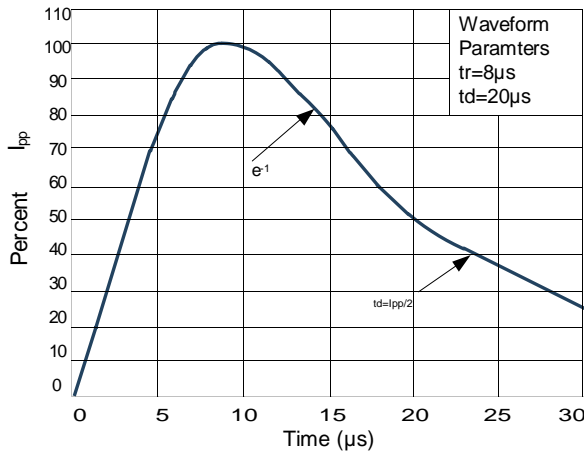


Fig.3 PulseWaveform-8/20μs

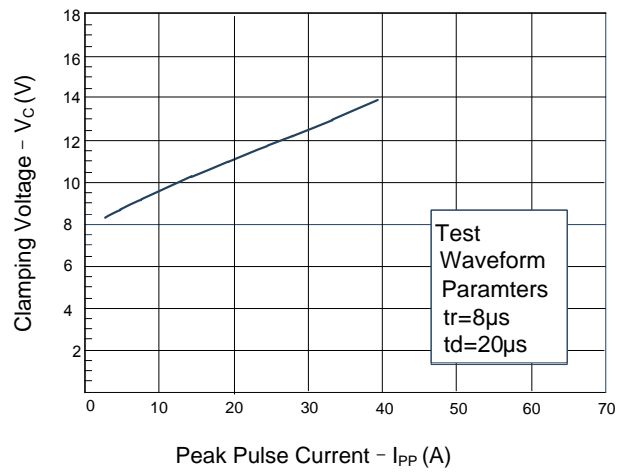
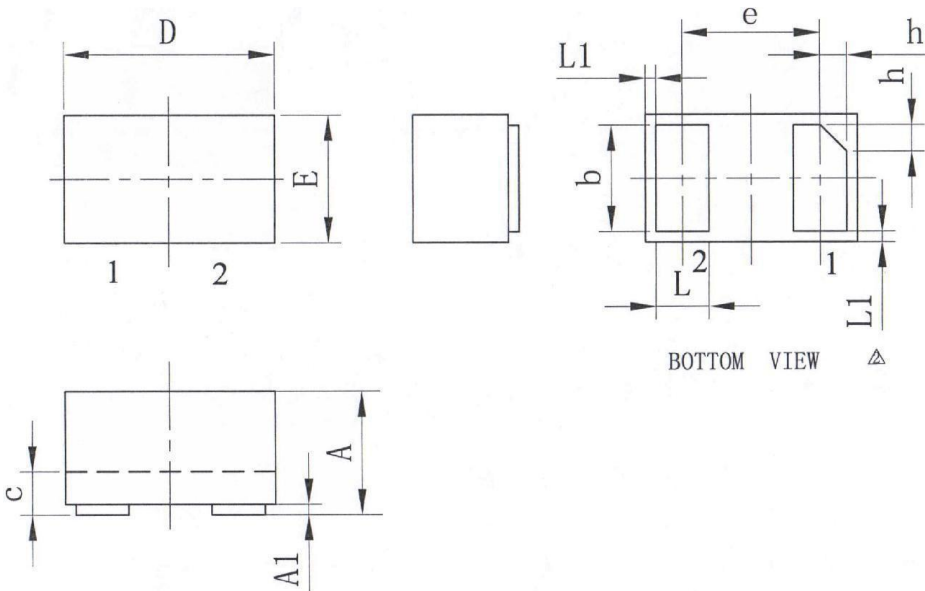


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

## Package Outline Dimensions: DFN1006



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	0.02	0.05
b	0.45	0.50	0.55
c	0.12	0.15	0.18
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05REF		
h	0.07	0.12	0.17
载体尺寸 (M1)	20*20		