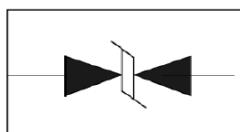



DFN1006

Features

80Watts peak pulse power($t_p=8/20\mu s$)

Low clamping voltage

Low leakage current

Glass passivated junction

Low capacitance

IEC 61000-4-2 ±15KV contact ±15KV air

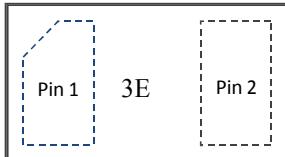
Halogen free and RoHS compliant

Mechanical Data

CASE: DFN1006 Molded Plastic

Molding compound flammability rating: UL 94V-0

Mounting Position: Any

Making Code & Ordering information


Ordercode	Package	Base qty	Deliverymode
PDF2V03C	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}	80	Watts
Peak Pulse Current ($t_p=8/20\mu s$) (note1)	I_{PP}	10	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V_{ESD}	25 15	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}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	3.8			V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V, T=25^\circ C$		0.1	0.2	μA
Peak Pulse Current	I_{PP}	$t_p =8/20\mu s$			10	A
Clamping Voltage ¹⁾	V_{CL}	$I_{PP}=16A, t_p=100ns$		8		V
Clamping Voltage ²⁾	V_C	$I_{PP}=5A, t_p=8/20\mu s$			6	V
Clamping Voltage ²⁾		$I_{PP}=10A, t_p=8/20\mu s$			8	V
Dynamic resistance ¹⁾	R_{DYN}			0.2		Ω
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		12	15	pF



Ratings and Characteristic Curves

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

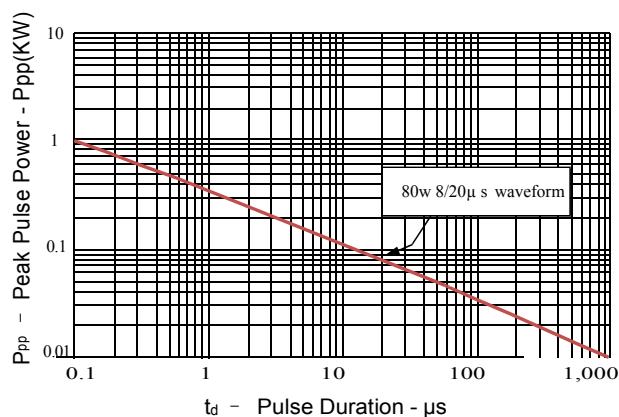


Figure 1: Peak Pulse Power vs. Pulse Time

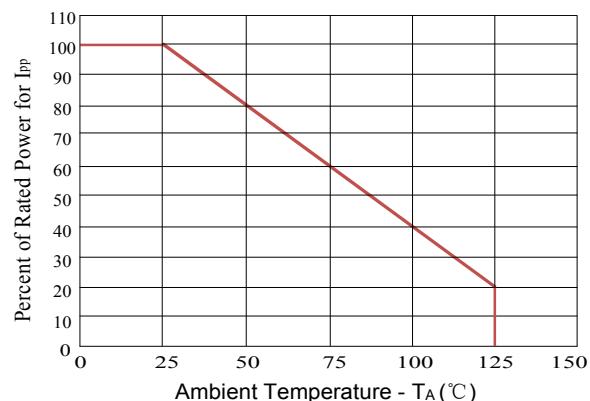


Figure 2: Power Derating Curve

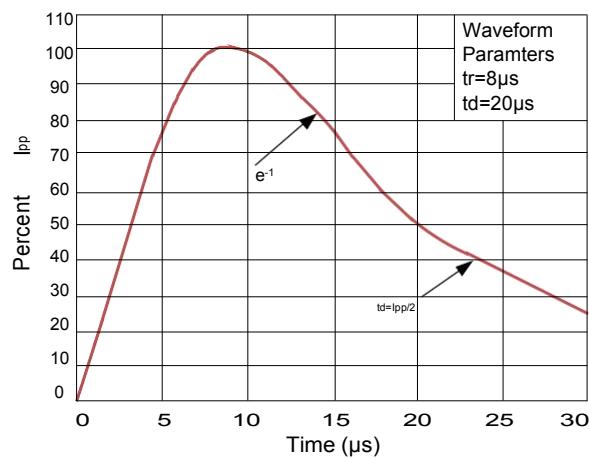


Figure 3: Pulse Waveform

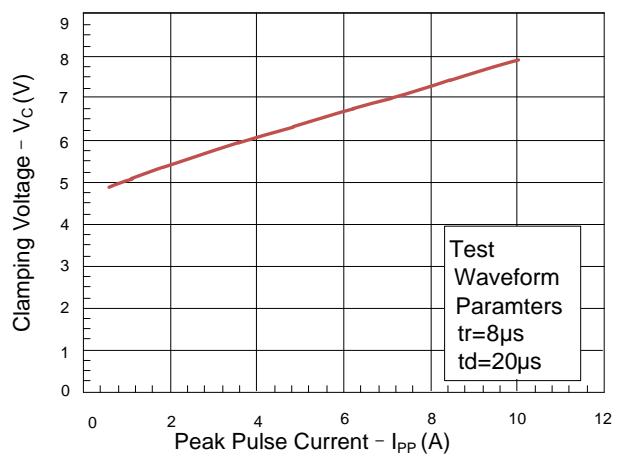
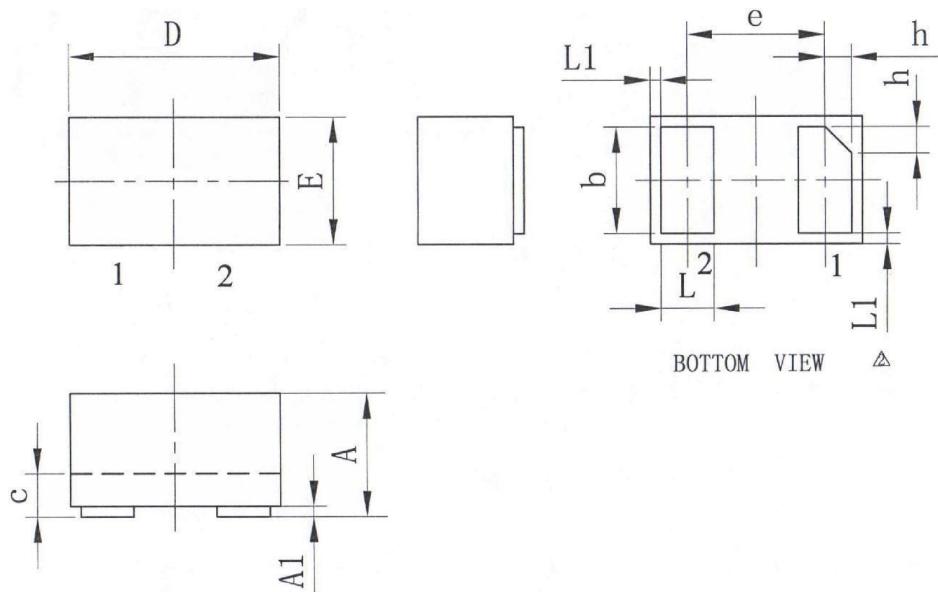


Figure 4: Clamping Voltage vs. Ipp

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 (Mil)	20*20		