

## Features

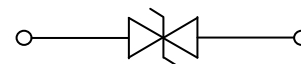
- 80 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Bidirectional configurations
- Protects I/O and power port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30KV$  contact  $\pm 30KV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lighting) 10A (8/20 $\mu s$ )



DFN1006

## Applications

- Cell Phone
- PDA
- Notebook
- Digital Cameras
- Portable Instrumentation
- Audio and video equipment



Schematic Diagram

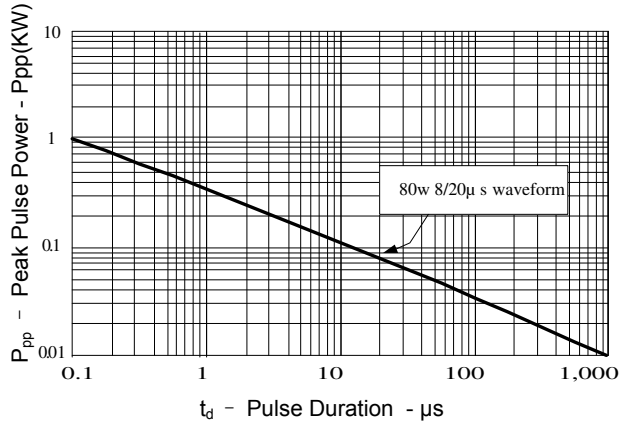
## Absolute Maximum Ratings ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Max.	Unit
Peak Pulse Power ( $T_P=8/20\mu S$ )	$P_{PP}$	80	W
Peak Pulse Current ( $t_p = 8/20\mu S$ )	$I_{PP}$	10	A
Junction Temperature	$T_J$	-55 To +125	$^\circ C$
Storage Temperature	$T_{STG}$	-55 To +150	$^\circ C$

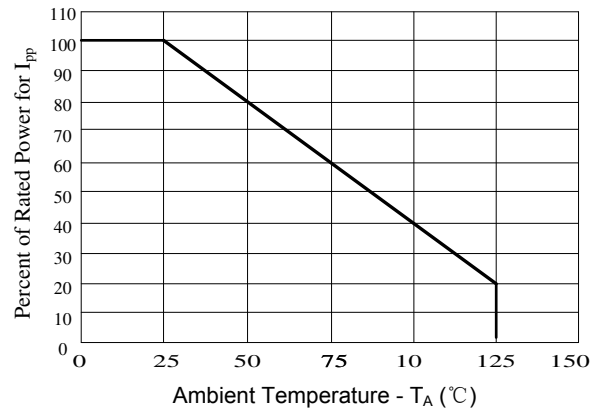
## Electrical Characteristics ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	3.8	-	-	V
Reverse Leakage Current	$I_R$	$V_R=3.3V$	-	0.1	0.2	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=5A, T_P=8/20\mu S$	-	-	6	V
	$V_C$	$I_{PP}=10A, T_P=8/20\mu S$	-	-	8	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	12	15	pF

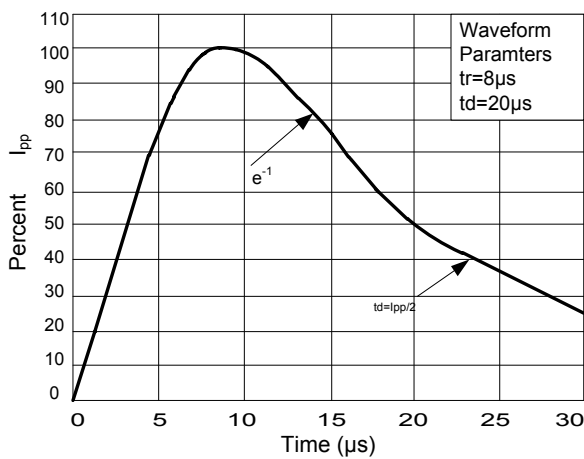
**Typical Characteristic Curves**



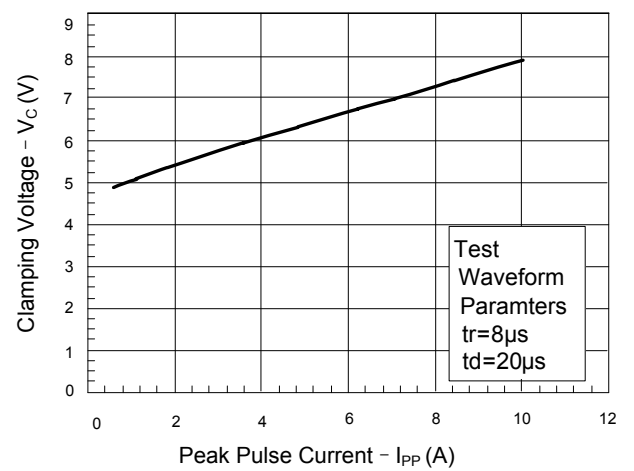
**Fig.1 Peak Pulse Power vs. Pulse Time**



**Fig.2 Power Derating Curve**

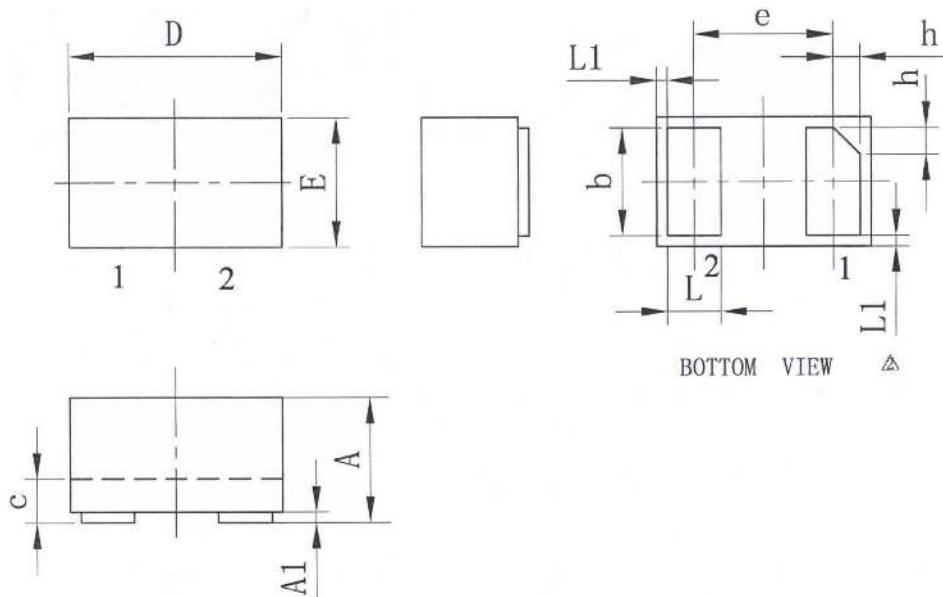


**Fig.3 Pulse Waveform**



**Figure 4: Clamping Voltage vs. I\_pp**

**Package Outline Dimensions (DFN1006)**



Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.45	0.50	0.55
A1	0.00	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	0.65 BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05 REF		
h	0.07	0.12	0.17
Carrier Dimensions	20*20		

**Order Information**

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEZ3B120	DFN1006	3E	Tape & Reel	10,000pcs / Reel	RoHS compliant