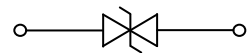


## Features

- 160 Watts peak pulse power ( $T_p = 8/20\mu s$ )
- DFN1006 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 8A (8/20 $\mu s$ )
- RoHS compliant



DFN1006



Schematic Diagram

## Applications

- Cell phone
- PDA
- Notebook
- Digital cameras
- Portable instrumentation
- Audio and video equipment

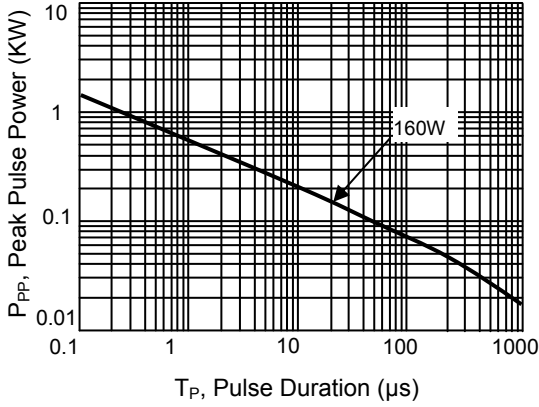
## Absolute Maximum Ratings ( $T_A=25^\circ C$ , unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	160	W
Peak Pulse Current ( $T_p=8/20\mu s$ )	$I_{PP}$	8	A
Junction Temperature	$T_J$	-55 To +125	$^\circ C$
Storage Temperature	$T_{STG}$	-55 To +150	$^\circ C$

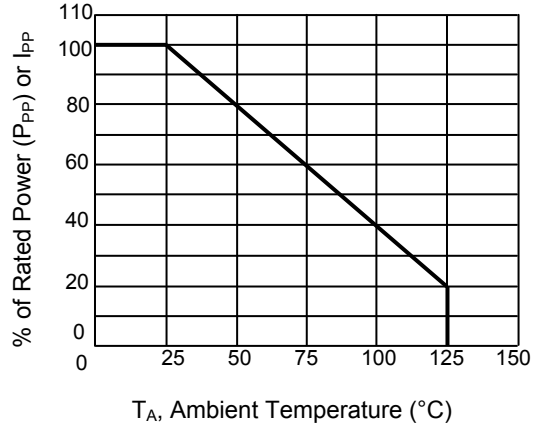
## Electrical Characteristics ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	12	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	13.3	-	-	V
Reverse Leakage Current	$I_R$	$V_R=12V$	-	0.1	1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=8A, T_p=8/20\mu s$	-	16	20	V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	-	10	-	pF

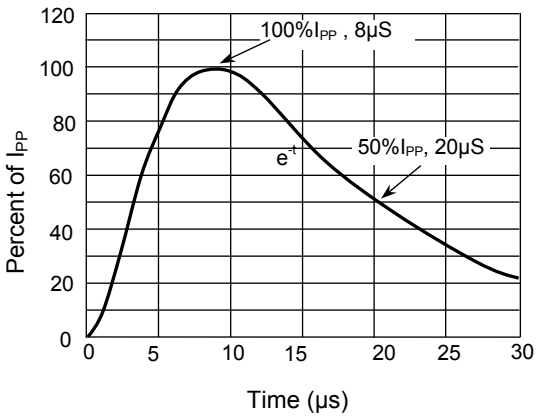
**Typical Characteristic Curves**



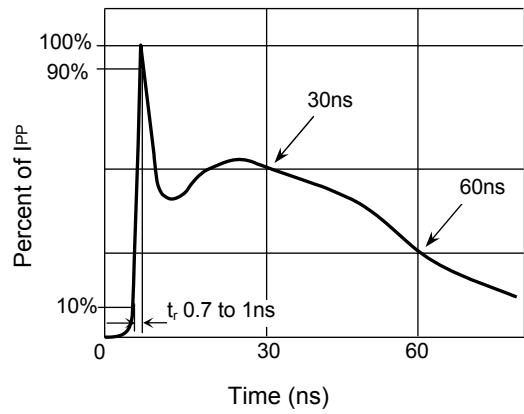
**Figure 1. Peak Pulse Power Rating Curve**



**Figure 2. Pulse Derating Curve**

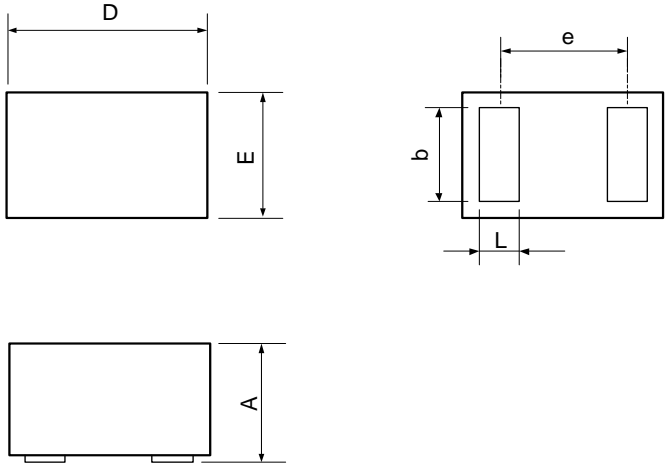


**Figure 3. Pulse Waveform - 8/20 µs**



**Figure 4. Pulse Waveform - ESD (IEC61000-4-2)**

**Package Outline Dimensions (DNF1006)**



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
A	0.450	0.550	0.018	0.022
b	0.450	0.550	0.018	0.022
L	0.200	0.300	0.008	0.012
e	0.650 BSC		0.026 BSC	

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSEZ12B100	DNF1006	12B	Tape & Reel	10,000pcs / Reel