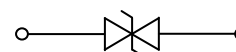


### Features

- 132 Watts peak pulse power ( $T_P=8/20\mu s$ )
- DFN1006 package
- Snap-Back technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.70pF typical)
- ESD Protection for High-Speed Data Lines to:  
 IEC 61000-4-2  $\pm 30KV$  Contact,  $\pm 30KV$  air  
 IEC 61000-4-4 (EFT) 40A (5/50ns)  
 IEC 61000-4-5 (Lightning) 15A (8/20 $\mu s$ )
- RoHS Compliant



DFN1006



Schematic Diagram

### Applications

- USB 2.0
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- 1G/2.5G Ethernet

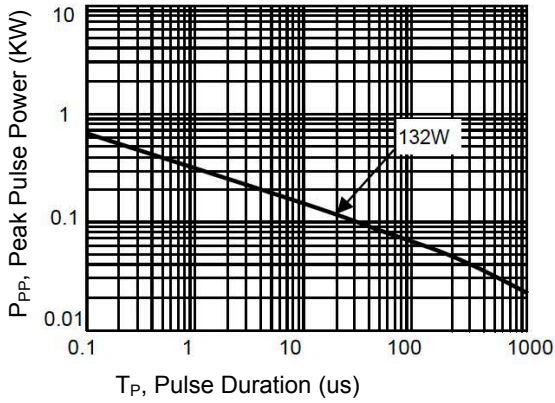
### Absolute Maximum Ratings ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu S$ )	$P_{PP}$	132	W
Peak Pulse Current ( $T_P=8/20\mu S$ )	$I_{PP}$	15	A
Junction Temperature	$T_J$	-55 To +125	$^\circ C$
Storage Temperature	$T_{STG}$	-55 To +150	$^\circ C$

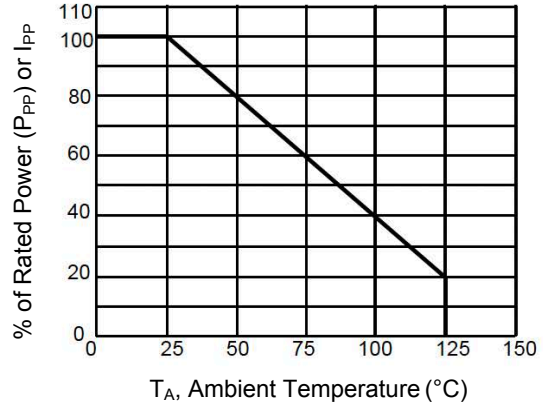
### Electrical Characteristics ( $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	5.5	6.5	10	V
Reverse Leakage Current	$I_R$	$V_R=5.0V$	-	0.01	0.1	$\mu A$
Trigger Voltage	$V_T$	$I_{PP}=15A, T_P=8/20\mu S$	-	9	-	V
Clamping Voltage	$V_C$	$I_{PP}=15A, T_P=8/20\mu S$	-	8.8	-	V
Clamping Voltage (TLP 8A)	$V_C$	IEC 61000-4-2 Level 2 ( $\pm 4$ kV Contact, $\pm 4$ kV Air)	-	4.5	-	V
Clamping Voltage (TLP 16A)	$V_C$	IEC 61000-4-2 Level 4 ( $\pm 8$ kV Contact, $\pm 8$ kV Air)	-	6.0	-	V
Dynamic Resistance	$R_{dyn}$	$I_T=0-30A, T_P=TLP$	-	0.25	-	$\Omega$
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz,$ I/O to GND	-	0.7	1.50	pF

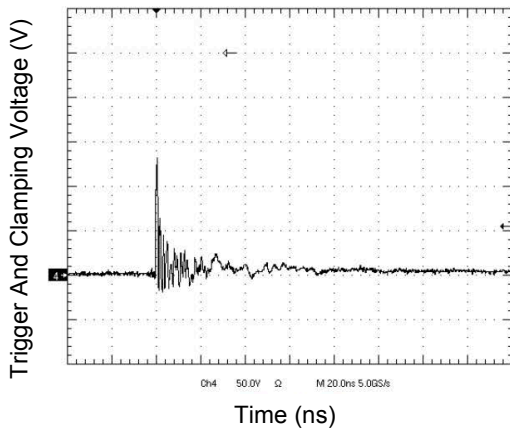
**Typical Characteristic Curves**



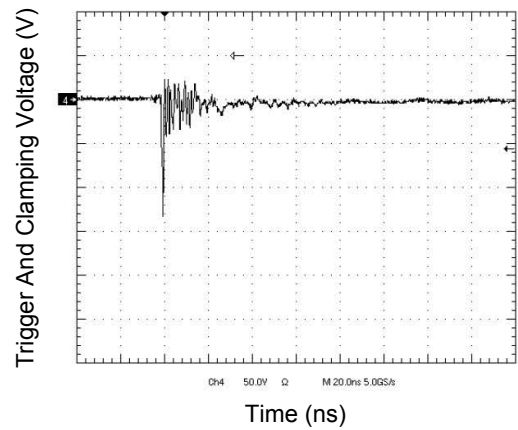
**Figure 1. Peak Pulse Power Rating Curve**



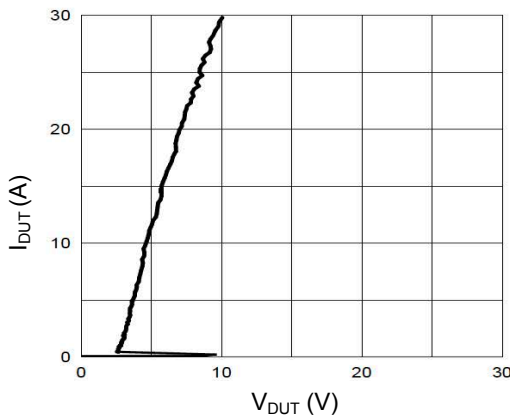
**Figure 2. Pulse Derating Curve**



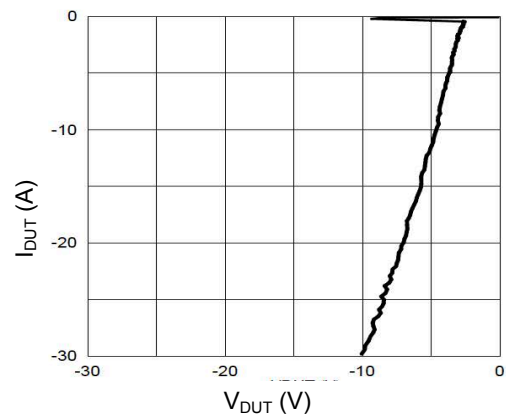
**Figure 3. IEC61000-4-2 +8kV Contact Discharge**



**Figure 4. IEC61000-4-2 -8kV Contact Discharge**

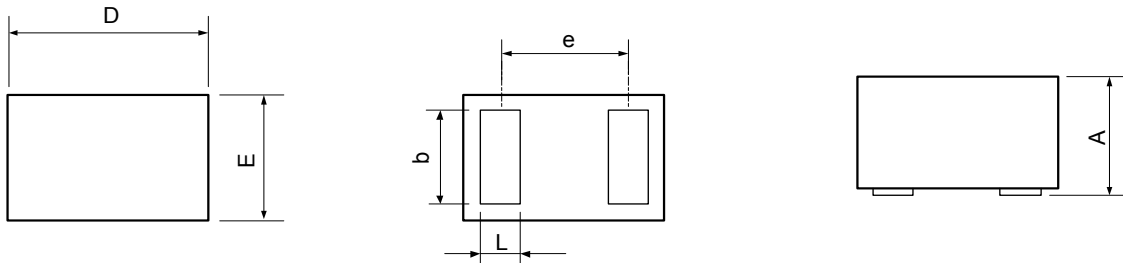


**Figure 5. Transmission Line Pulse ( $T_p=100ns$ )**



**Figure 6. Transmission Line Pulse ( $T_p=100ns$ )**

**Product Dimensions (DFN1006)**



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	HSF Status
GSEZ5B008	DFN1006	X	Tape & Reel	10,000pcs	RoHS Compliant