

Features

- Bi - directional configuration
- Low capacitance and low leakage
- Response time is typically < 1ns
- UL-94 V-0 / Green EMC
- Matte tin lead finish (Pb-Free)
- IEC 61000-4-2 level 4 ESD Protection:
IEC 61000-4-2 ±20KV Contact, ±25KV air
- RoHS Compliant



DFN1006



Schematic Diagram

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

Parameter	Symbol	Value	Unit
Total Power Dissipation on FR-5 Board	P_D	200	mW
Junction Temperature	T_J	-55 To +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 To +150	$^{\circ}\text{C}$
Lead Solder Temperature - Maximum (10s Duration)	T_L	260	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Working Peak Voltage	V_{RWM}	-	-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	5.6	-	8.0	V
Reverse Leakage Current	I_{R1}	$V_{RWM}=5.0\text{V}$	-	-	0.5	μA
Reverse Leakage Current	I_{R2}	$V_R=3.5\text{V}$	-	-	0.3	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A}$	-	-	9.8	V
Clamping Voltage	V_C	$I_{PP}=5.5\text{A}$	-	-	12.5	V
Capacitance	C	$V_R=0\text{V}$, $f=1\text{MHz}$	-	-	15	pF

Typical Characteristic Curves

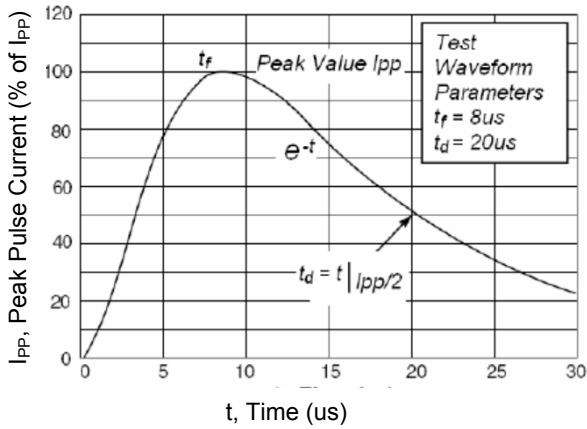


Figure 1. Pulse Waveform

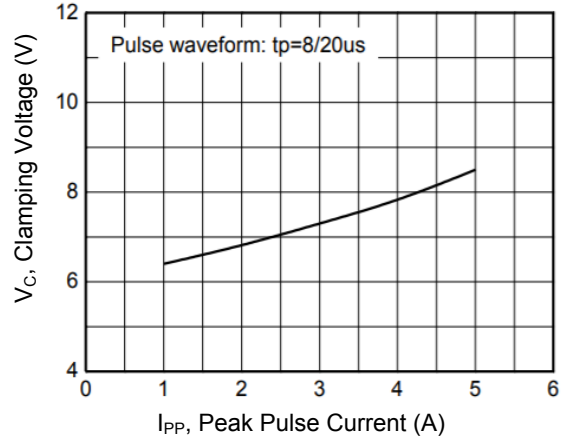


Figure 2. Clamping Voltage vs. Peak Pulse Current

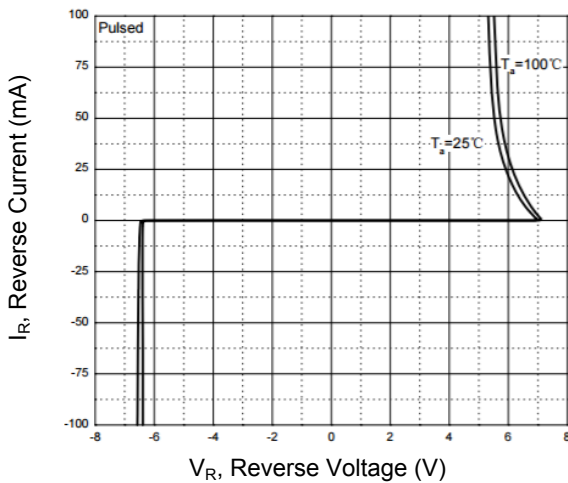


Figure 3. Reverse Characteristics

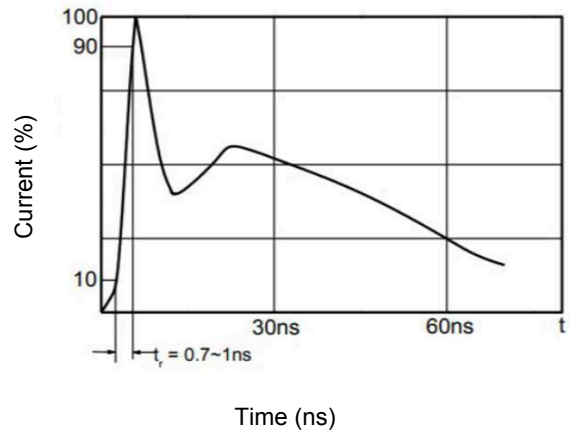


Figure 4. Contact Discharge Current Waveform Per IEC61000-4-2

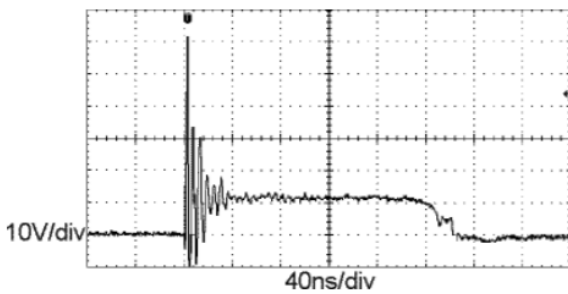


Figure 5. ESD Clamping (+8KV Contact Discharge Per IEC 61000-4-2)

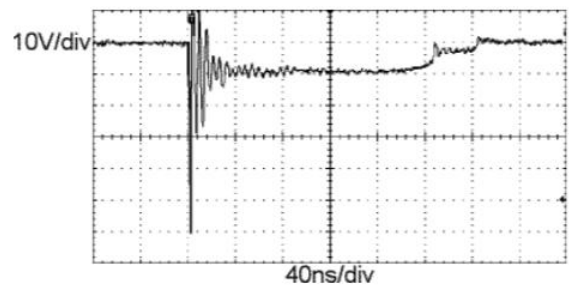
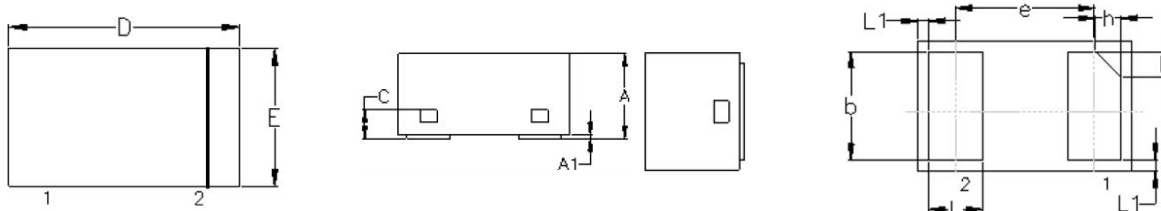


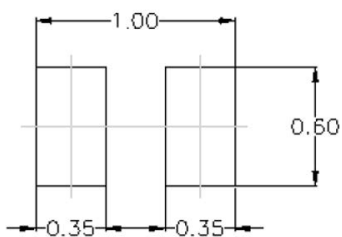
Figure 6. ESD Clamping (-8KV Contact Discharge Per IEC 61000-4-2)

Package Outline Dimension (DFN1006)



Symbol	Dimensions 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

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEZ5B151	DFN1006	AK	Tape & Reel	10,000pcs / 7" Reel	RoHS Compliant