GOOD-ARK
SEMICONDUCTOR

GSEZ5B159
ESD Protection Diode

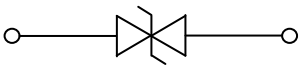
Features

- 150W peak pulse power (tp=8/20μs)
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2 ±30KV contact ±30KV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)

DFN1006

Applications

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



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Max.	Unit
Peak Pulse Power (T_P=8/20μS)	P_{PP}	150	W
Peak Pulse Current (t_P=8/20μS)	I_{PP}	9.4	A
Junction Temperature	T_J	-55 To +125	°C
Storage Temperature	T_{STG}	-55 To +150	°C

Electrical Characteristics (T_A=25°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	5.6	6.8	-	V
Reverse Leakage Current	I_R	V_R=5V	-	-	1	μA
Clamping Voltage	V_C	I_{PP}=5A, T_P=8/20μS	-	-	11.6	V
	V_C	I_{PP}=9.4A, T_P=8/20μS	-	-	18.6	V
Junction Capacitance	C_J	V_R=0V, f=1MHz	-	15	-	pF

Typical Characteristic Curves

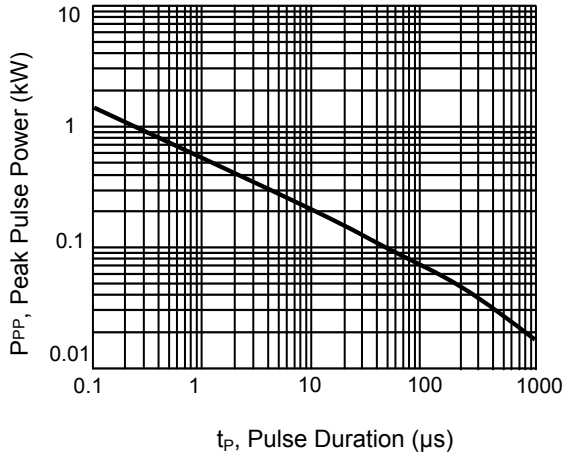


Figure 1. Peak Pulse Power Rating Curve

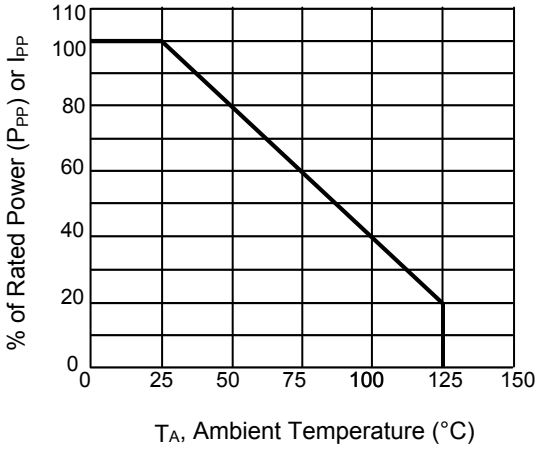


Figure 2. Pulse Derating Curve

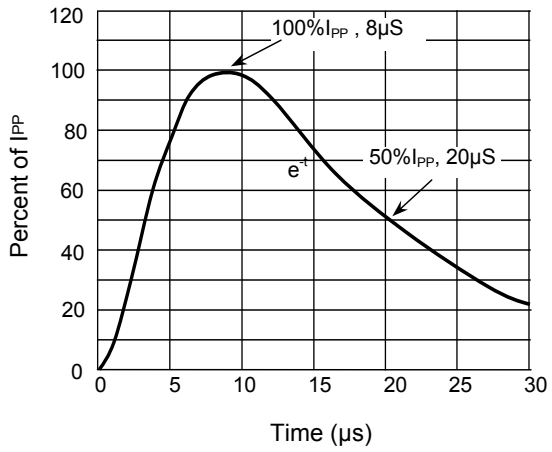


Figure 3. Pulse Waveform-8/20μs

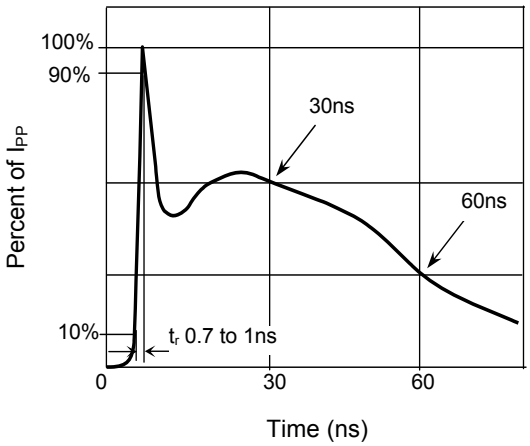
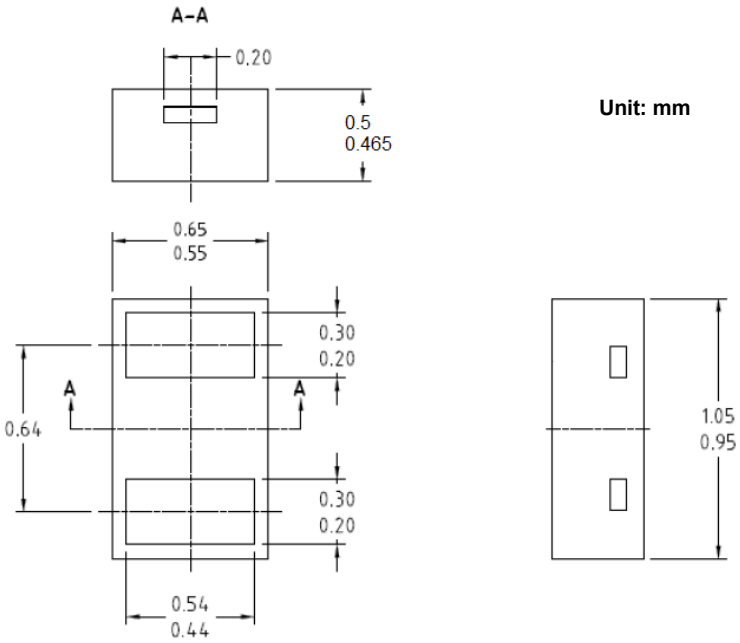


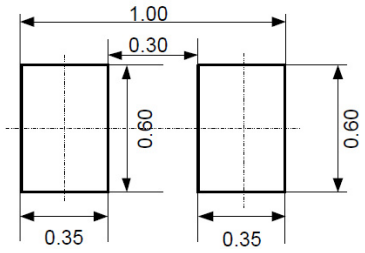
Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

Package Outline Dimensions DFN1006



Unit: mm

Recommened Pad Layout



Unit: mm

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEZ5B159	DFN1006	C	Tape & Reel	10,000pcs / Reel	RoHS compliant