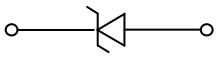
GOOD-ARK
SEMICONDUCTOR

GSEZ3U530
Low Capacitance TVS Protection

Features

- 130Watts peak pulse power (tp = 8/20μs)
- Unidirectional configuration
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Protection one data/power line to:
  IEC 61000-4-2 ±30kV contact ±30kV air
  IEC 61000-4-4 (EFT) 40A (5/50ns)
  IEC 61000-4-5 (Lightning) 8.7A (8/20μs)

DFN1006



Schematic Diagram

Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)
- DC Power Line Protection

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (T_P=8/20μS)	P_{PP}	130	W
ESD Contact/air Discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current (t_P = 8/20μS)	I_{PP}	8.7	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	Condition	Min	Typ	Max	Unit
Reverse Stand-off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	5.0	-	-	V
Reverse Leakage Current	I_R	V_R=3.3V	-	-	1	uA
Clamping Voltage (IEC 61000-4-5)	V_C	I_{PP}=8.7A	-	12.3	15	V
Junction Capacitance	C_J	V_R=0V, f=1MHz	-	53	-	pF

Typical Characteristic Curves

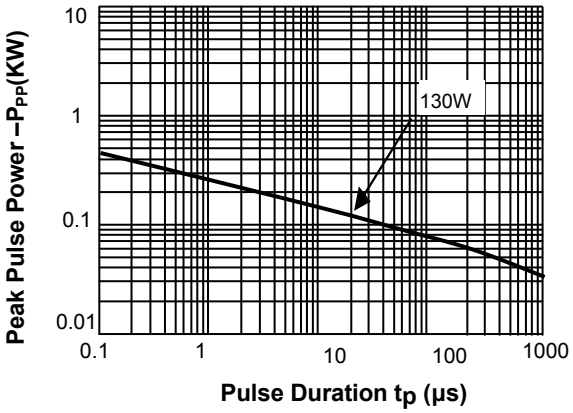


Figure 1. Peak Pulse Power Rating Curve

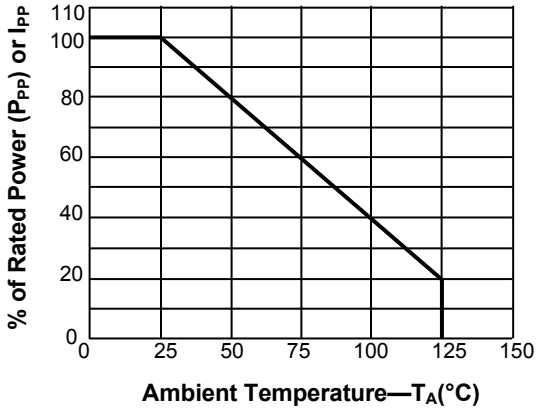


Figure 2. Pulse Derating Curve

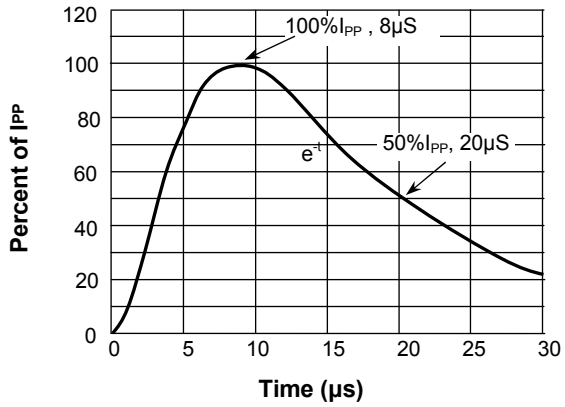


Figure 3. Pulse Waveform-8/20μs

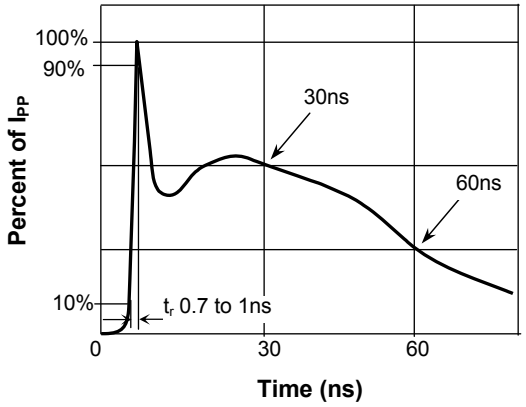
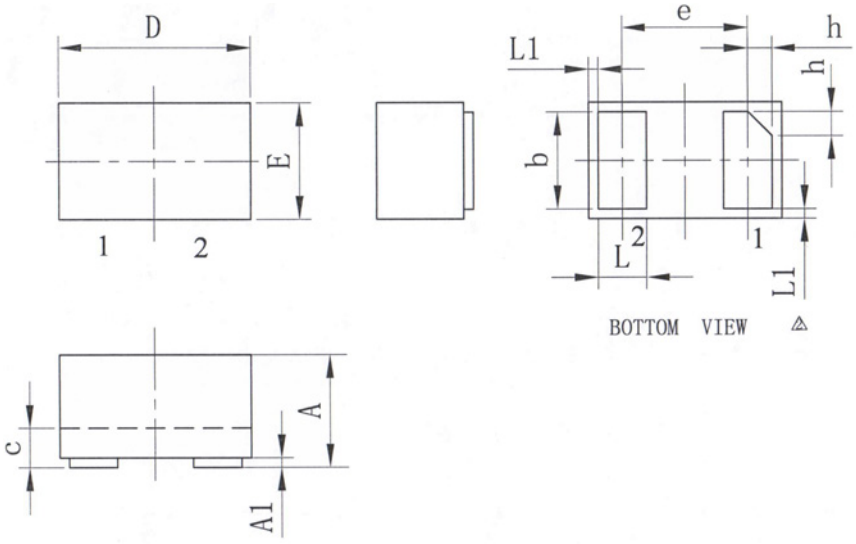


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

Package Outline Dimensions (DFN1006)



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	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	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05REF		
h	0.07	0.12	0.17
载体尺寸 (M11)	20*20		

Order Information

Device	Package	Marking	Quantity	HSF Status
GSEZ3U530	DFN1006	5U	10,000pcs / reel	RoHS compliant