

Features

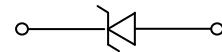
- 144 Watts peak pulse power ($T_p=8/20\mu s$)
- DFN1006 package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low Leakage current
- IP67 protection one data/power line to:
 IEC 61000-4-2 ±30kV contact ±30kV air
 IEC 61000-4-4 (EFT) 40A (5/50ns)
 IEC 61000-4-5 (Lightning) 12A (8/20μs)
- RoHS compliant



DFN1006

Applications

- Audio line, speaker, headset, microphone protection
- Human interface devices (Keyboard, Touchpad, Buttons)
- DC power line protection



Schematic Diagram

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P_{PP}	144	W
Peak Pulse Current (8/20μs)	I_{PP}	12	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.8	-	-	V
Reverse Leakage Current	I_R	$V_R=3.3V$	-	0.01	0.5	μA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=12A$	-	10	12	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	-	80	-	pF

Typical Characteristic Curves

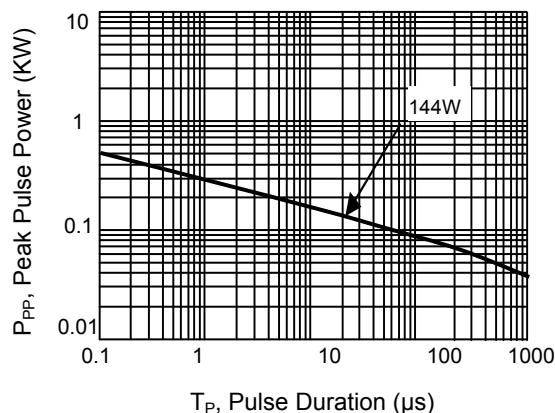


Figure 1. Peak Pulse Power Rating Curve

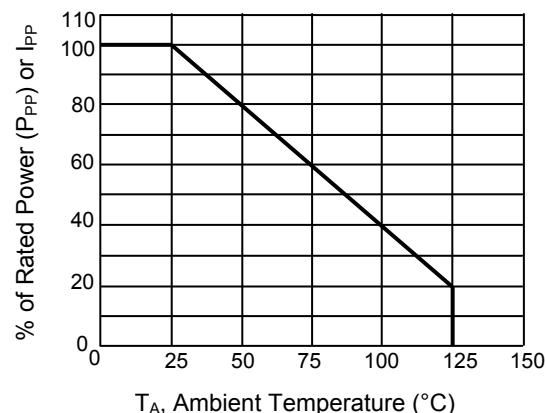


Figure 2. Pulse Derating Curve

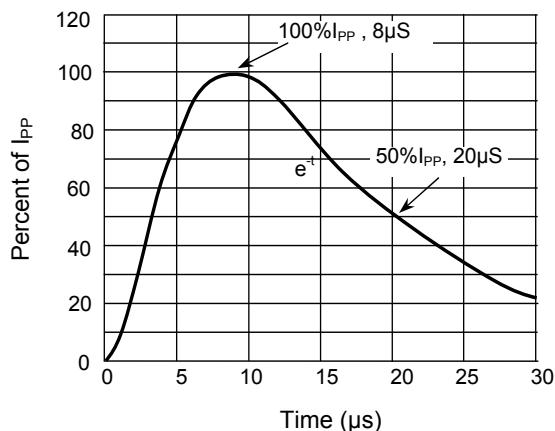


Figure 3. Pulse Waveform-8/20μs

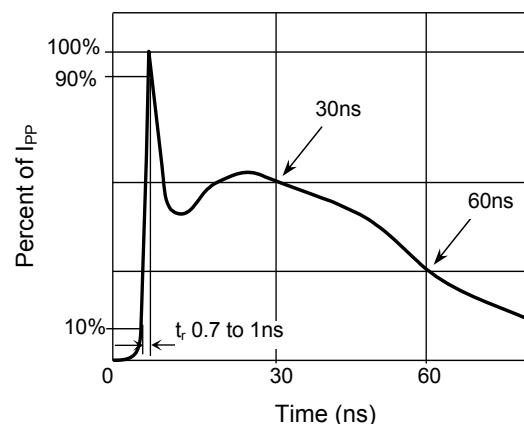
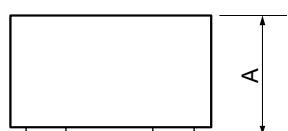
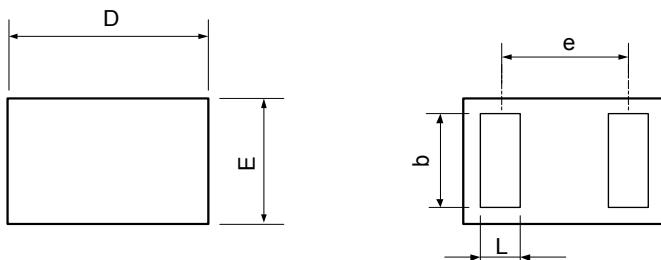


Figure 4. Pulse Waveform-ESD (IEC61000-4-2)

Package Outline Dimensions (DFN1006)



Symbol	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
GSEZ3U080	DFN1006	04F	Tape & Reel	10,000pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com