

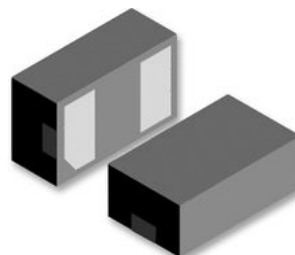
Features

- 780Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1006 package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 52A (8/20 μs)
- RoHS compliant

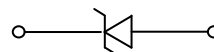
Applications

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

SES6V3D1006-2U



DFN1006



Schematic Diagram

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}	780	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	52	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	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				6.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	6.8			V
Reverse Leakage Current	I_R	$V_R = 6.3V$		0.1	1.0	μA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP} = 52A$		14	15	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		450		pF

Typical Characteristic Curves

Figure 1: Peak Pulse Power vs. Pulse Time

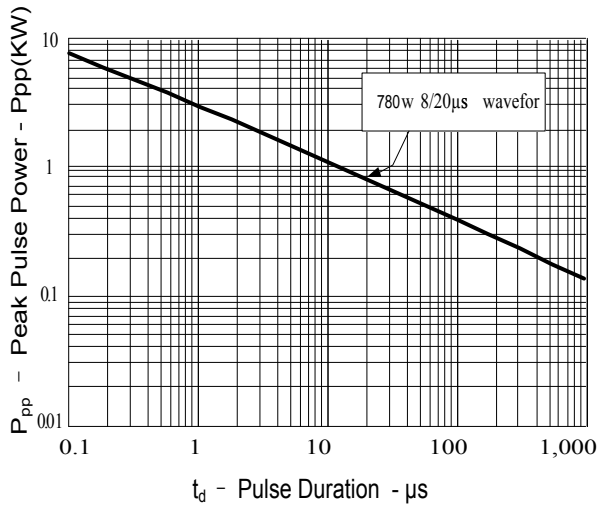


Figure 2: Power Derating Curve

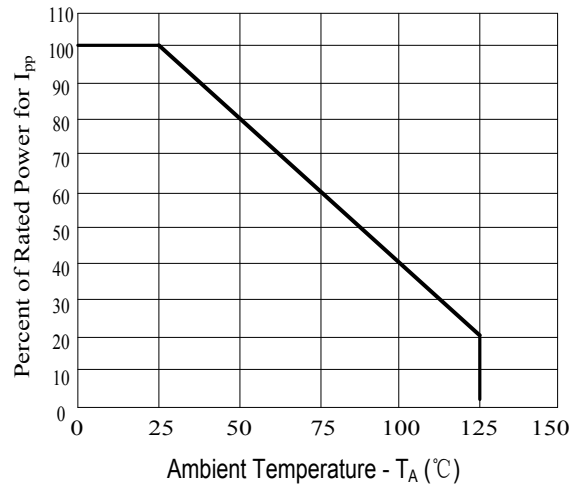


Figure3: Pulse Waveform

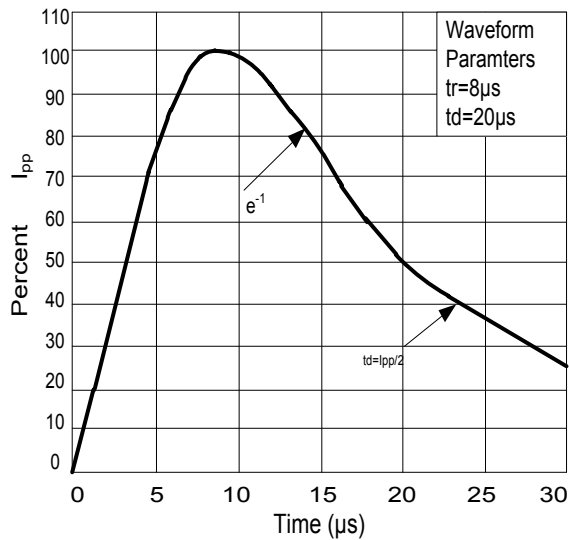
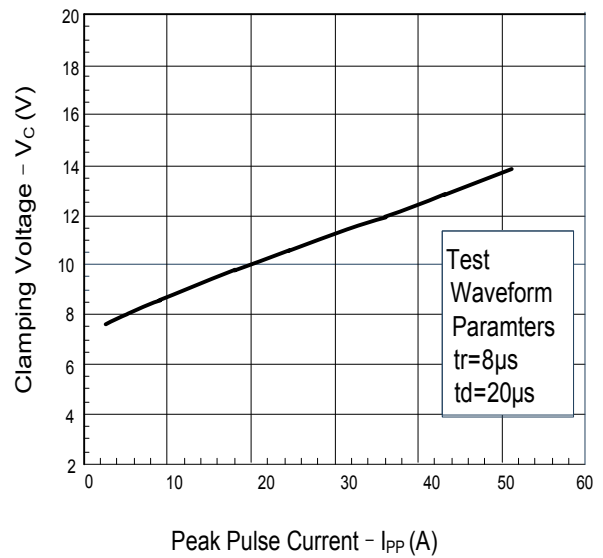
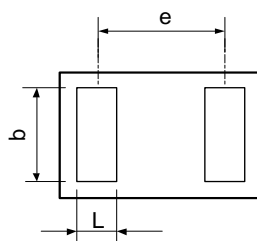
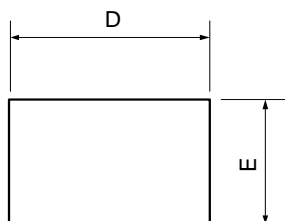


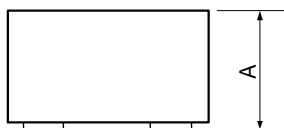
Figure 4: Clamping Voltage vs. I_pp



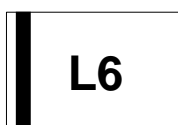
Product Dimensions



Symbol	Milimeter		
	min	nom	max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
A	0.45	0.50	0.55
b	0.45	0.50	0.55
L	0.20	0.25	0.30
e	0.65BSC		



Marking



Order Information


Device	Package	Carrier	Quantity	HSF Status
SES6V3D1006-2U	DFN1006	Tape & Reel	10,000pcs / reel	RoHS compliant

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