

Features

- 25 Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1006 package
- Bi-directional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j=0.9pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 8kV$ contact $\pm 15kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 1A (8/20 μs)
- RoHS compliant



DFN1006 (0402)



Schematic Diagram

Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)
- USB2.0, USB3.0, Firewire, DVI, HDMI, S-ATA
- Thunderbolt, Display Port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (T _P =8/20 μs)	P _{PP}	25	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	8/15	kV
Peak Pulse Current (t _P = 8/20 μs)	I _{PP}	1.0	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}				5.0	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	6.5		9.0	V
Reverse Leakage Current	I _R	V _R =5.0V			1	μA
Clamping Voltage (IEC 61000-4-5)	V _C	I _{PP} =1.0A		16	35	V
Trigger Voltage (IEC 61000-4-2)	V _T	V _{ESD} =8kV		90		V
Clamping Voltage (IEC 61000-4-2)	V _C	V _{ESD} =8kV		15		V
Junction Capacitance	C _J	V _R =0V, f=1MHz		0.6		pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

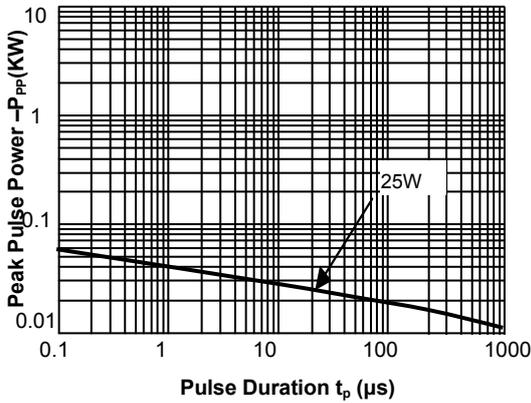


Fig.2 Pulse Derating Curve

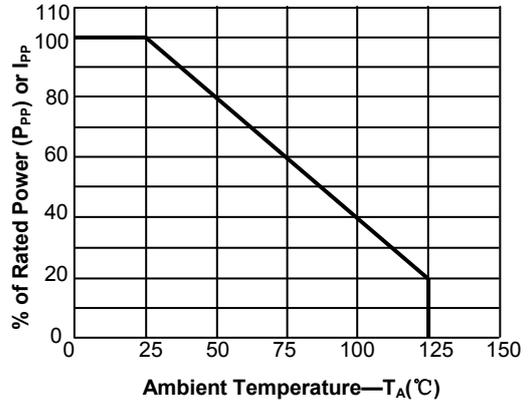


Fig.3 Pulse Waveform-8/20μs

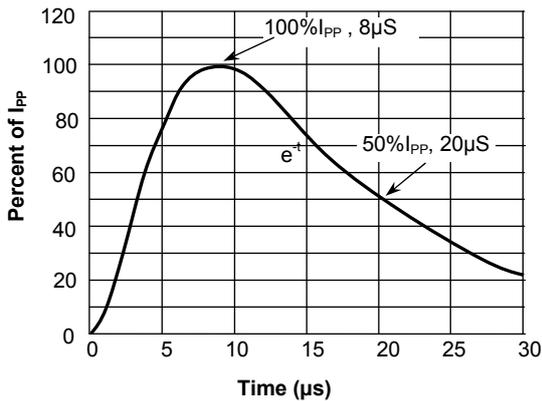
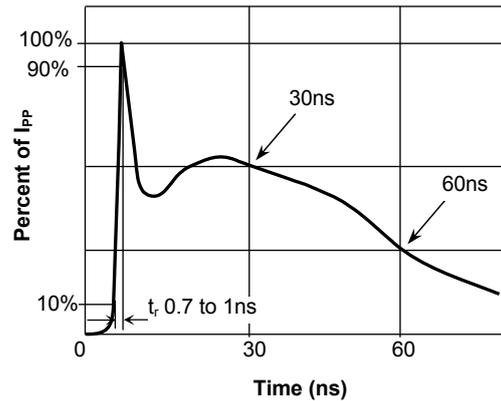
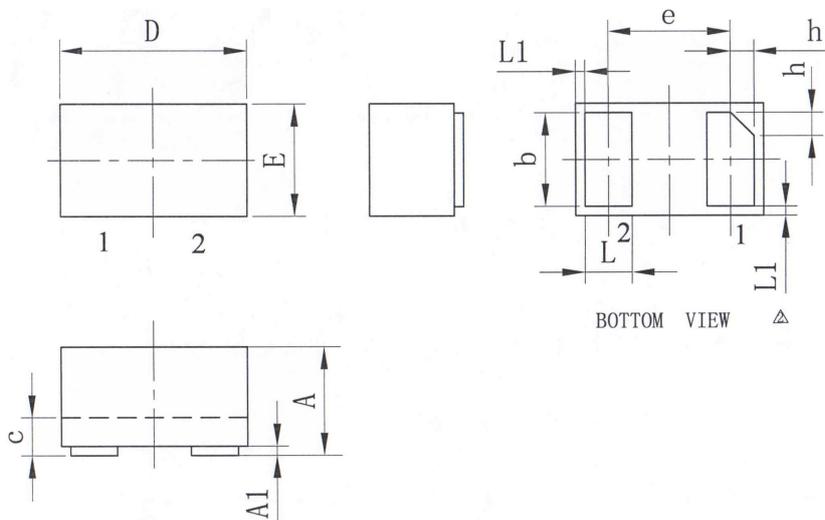


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Product Dimensions



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 (MM)	20*20		

Marking



Order Information

Device	Package	Carrier	Quantity	HSF Status
SESLC5VD1006-2B	DFN1006	Tape & Reel	12000pcs / Reel	RoHS compliant