

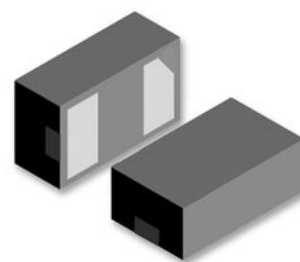
Features

- 300 Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1006 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- Protection 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) 20A (8/20 μs)
- RoHS compliant

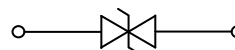
Applications

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

SES5VD1006H-2B



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}	300	W
Peak Pulse Current ($t_P = 8/20\mu s$)	I_{PP}	20	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}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	6.0	6.8		V
Reverse Leakage Current	I_R	$V_R = 5V$			1	μA
Clamping Voltage	V_C	$I_{PP} = 20A, T_P = 8/20\mu s$			15	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		30		pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

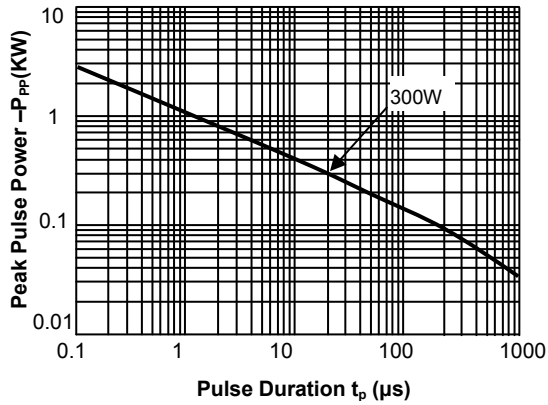


Fig.2 Pulse Derating Curve

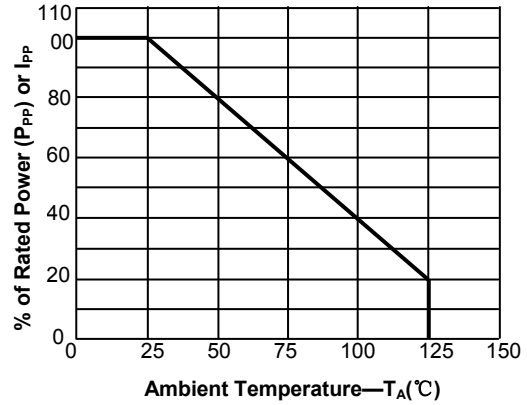


Fig.3 Pulse Waveform-8/20μs

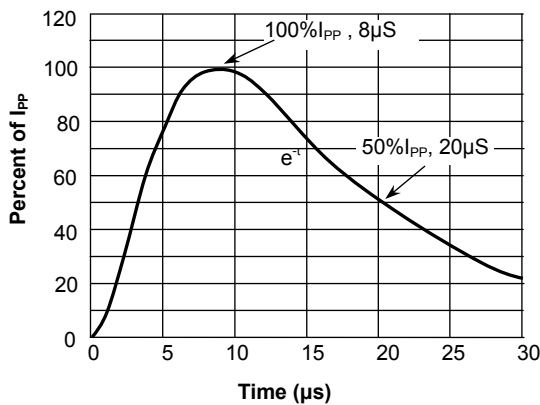
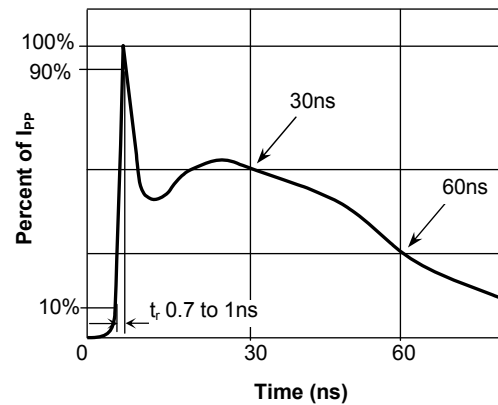
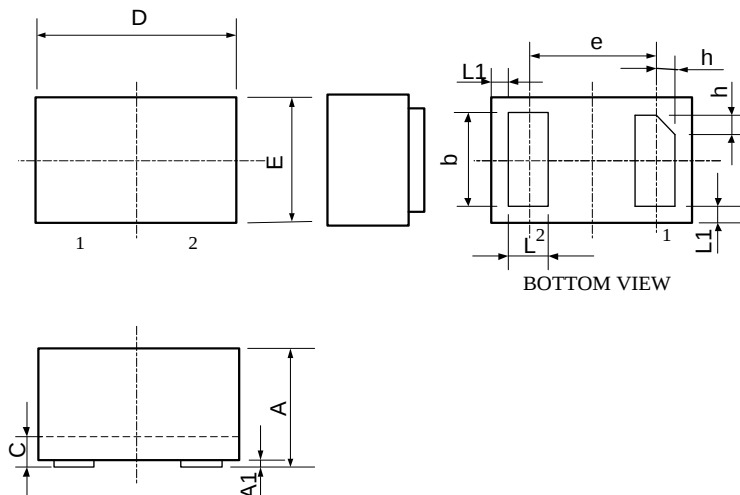


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

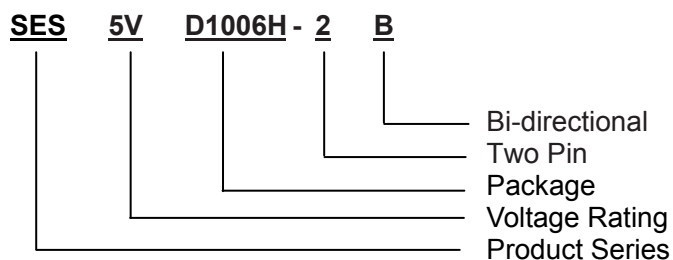


Product Dimensions



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

Part Number System



Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
SES5VD1006H-2B	DFN1006	VV	Tape & Reel	10,000pcs / Reel	RoHS compliant

Revision history

Date	Revision	Description of changes
12-March-2016	A0	First issue

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