

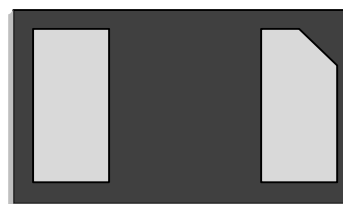
## Features

- 100 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- DFN1006-2L package
- Bidirectional configurations
- Protects I/O and power port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30KV$  contact  
 $\pm 30KV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lighting) 6A (8/20 $\mu s$ )

## Applications

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

## SES3V3D1006-2B



DFN1006-2L



Schematic Diagram

## Absolute Maximum Ratings

( $T_A=25^\circ C$ , Unless otherwise specified.)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	100	W
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	6	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ C$

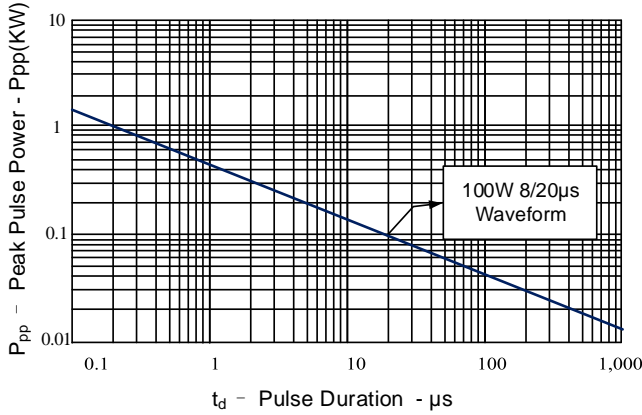
## Electrical Characteristics

( $T_A=25^\circ C$ , Unless otherwise specified.)

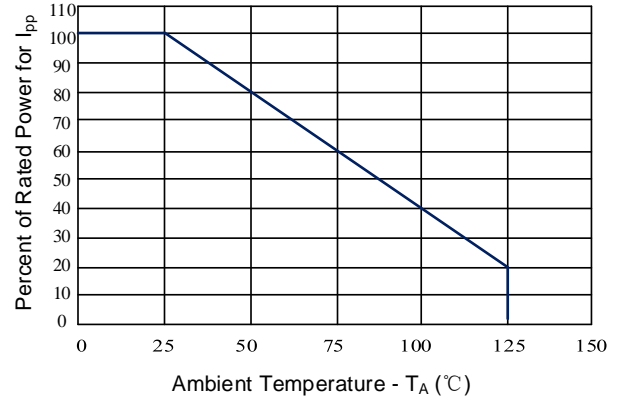
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$			4.8	V
Reverse Leakage Current	$I_R$	$V_R=3.3V$			1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP}=7A, T_p=8/20\mu s$			7.8	V
ESD Clamping Voltage	$V_C$			9.9		V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$		10		pF

## Typical Characteristic Curves

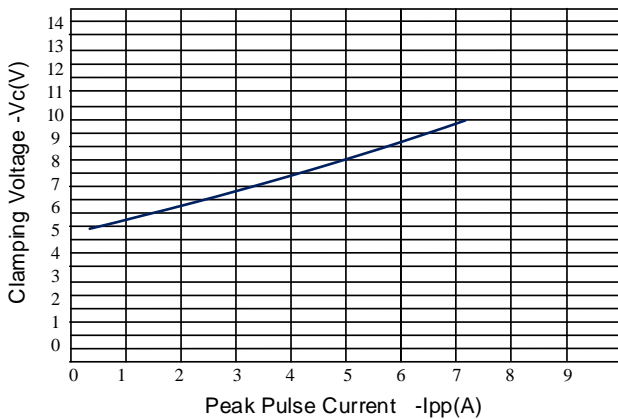
**Figure 1: Peak Pulse Power Vs Pulse Time**



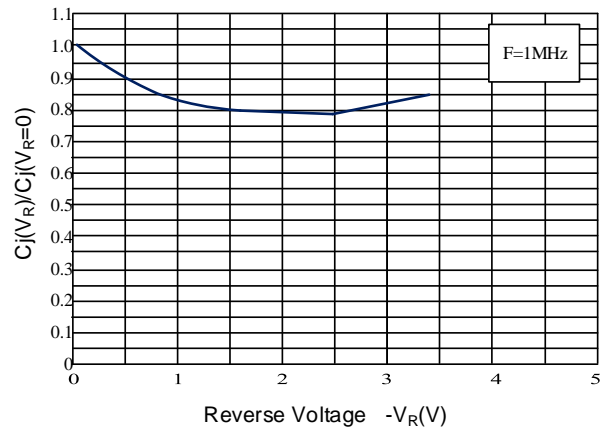
**Figure 2: Power Derating Curve**



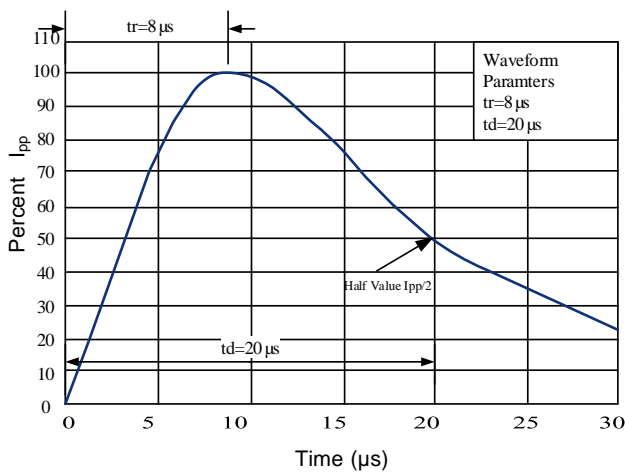
**Figure 3: Clamping Voltage vs. Peak Pulse Current**



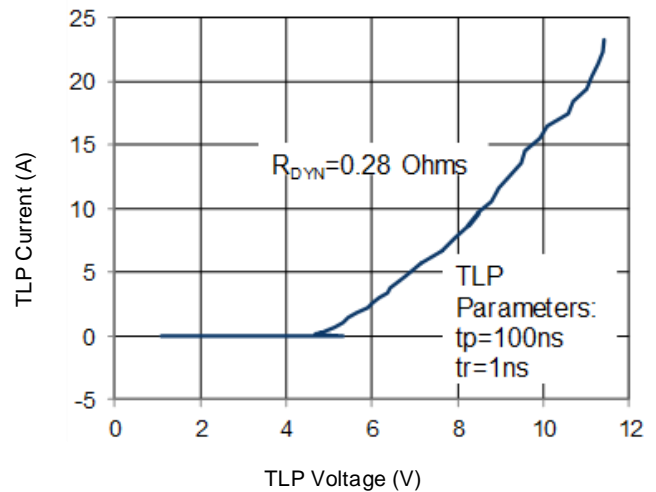
**Figure 4: Normalized Junction Capacitance vs. Reverse Voltage**



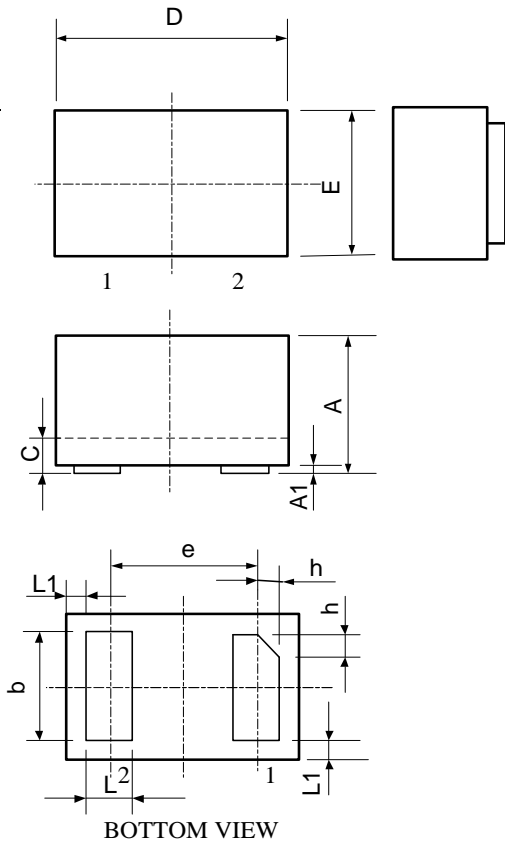
**Figure 5: 8/20μs Pulse Waveform**



**Figure 6: TLP I-V Curve**

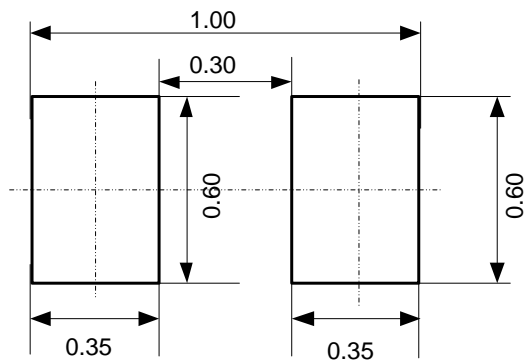


**PACKAGE OUTLINE**



SYMB	MILIMETER		
	MIN	NOM	MAX
OL			
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

**Land Pattern**



**Order Information**

Device	Package	Carrier	Quantity	HSF Status
SES3V3D1006-2B	DFN1006-2B	Tape & Reel	10000pcs / Reel	RoHS compliant

## Revision history


Date	Revision	Description of changes
12-MAY-2017	A0	First issue

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