

Features

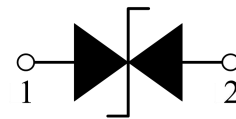
SES12VD1006SHSY-2B

- Low Capacitance: 8pF(typ.)
- Reverse Working Voltage: 12V
- IEC 61000-4-2 (ESD Air): ±30KV
IEC 61000-4-2 (ESD Contact): ±30KV
IEC 61000-4-5 (Lightning 8/20μs): 8.5A


DFN1006

Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA


Schematic Diagram

Limiting Values($T_A = 25\text{ }^\circ\text{C}$, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
V_{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±30	kV
		IEC 61000-4-2; Air Discharge	-	±30	kV
P_{PP}	Peak Pulse Power	$t_P = 8/20\ \mu\text{s}$	-	40	W
I_{PPM}	Rated Peak Pulse Current	$t_P = 8/20\ \mu\text{s}$	-	8.5	A
T_A	Ambient Temperature Range	-	-55	125	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-	-55	150	$^\circ\text{C}$

Electrical Characteristics($T_A = 25\text{ }^\circ\text{C}$, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V_{RWM}	Reverse Working Voltage	$T_A = 25\text{ }^\circ\text{C}$	-	12.0	-	V
V_{BR}	Breakdown Voltage	$I_R = 1\text{ mA}; T_A = 25\text{ }^\circ\text{C}$	-	14.0	-	V
I_R	Reverse Leakage Current	$V_{RWM} = 12\text{ V}; T_A = 25\text{ }^\circ\text{C}$	-	-	0.01	μA
V_C	Clamping Voltage	$I_{PP} = 8.5\text{ A}, t_P = 8/20\ \mu\text{s}$	-	19.5	-	V
C_J	Junction Capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	-	8.0	-	pF

Typical Characteristics

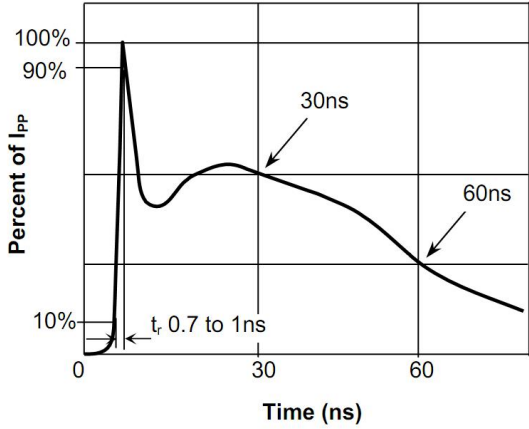


Fig.1 Pulse Waveform-ESD(IEC61000-4-2)

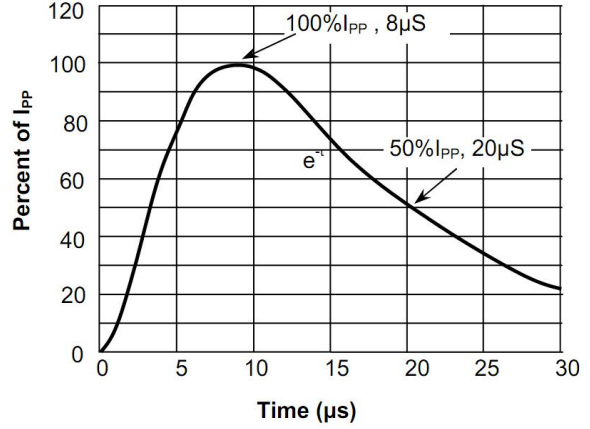


Fig.2 Pulse Waveform-8/20µs

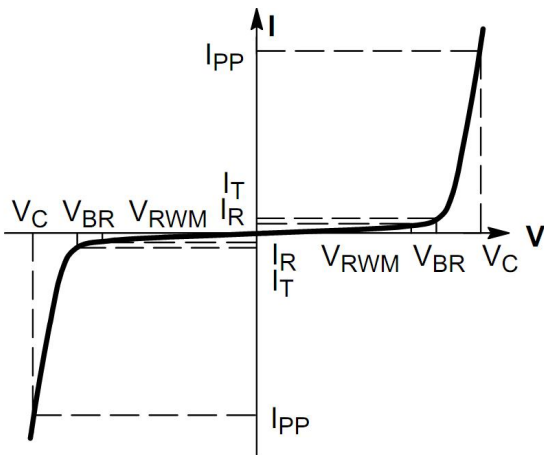


Fig.3 V-I Characteristics for Bidirectional Diode

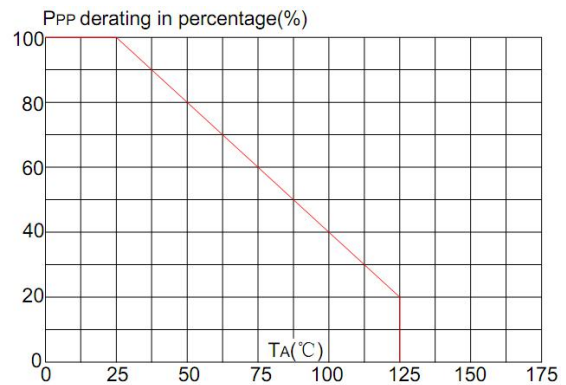


Fig.4 Power Derating Curve

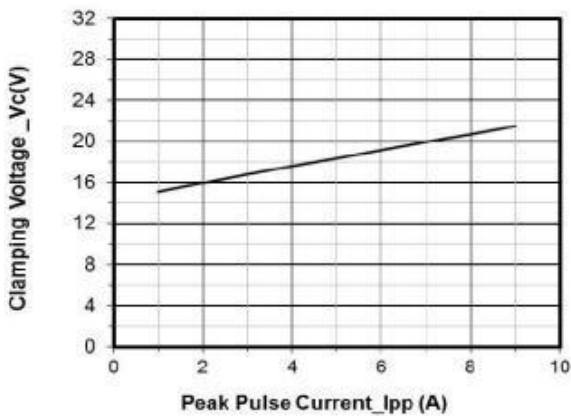


Fig.5 Clamping Voltage vs. Peak Pulse Current

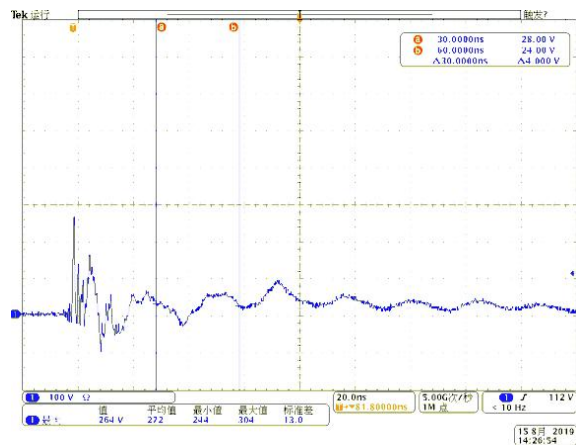
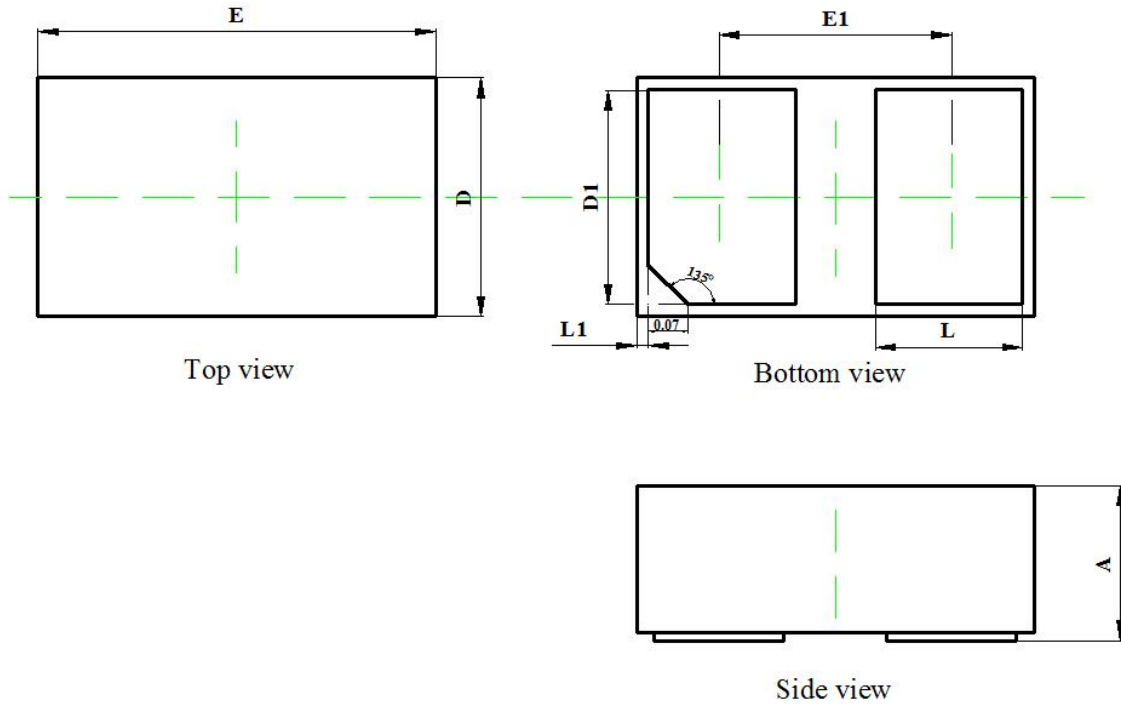


Fig.5 +8KV Curve

Package Outline Dimensions

DFN1006 Package Outline



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
L1	0.000	0.100	0.000	0.004

Order Information

Type	Package	Size (mm)	Delivery Form	Delivery Quantity
SES12VD1006SHSY-2B	DFN1006	1.00x0.60x0.37	7" T&R	10,000