1. Features

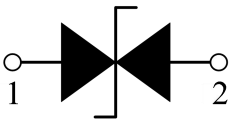
- 350W Peak Pulse Power (t_P=8/20μs)
- Low Capacitance: 1.0pF(typ.)
- Reverse Working Voltage: 3.3V
- IEC 61000-4-2 (ESD Air): ±20KV
  IEC 61000-4-2 (ESD Contact): ±20KV

2. Pin Description

3. Applications

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

4. Schematic Diagram



5. Order Information

Type	Package	Size (mm)	Delivery Form	Delivery Quantity
SCSB11S1	SOD323	2.60x1.30x1.00	7" T&R	3,000

6. Limiting Values(T_A = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
V_{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±20	kV
		IEC 61000-4-2; Air Discharge	-	±20	kV
P_{PP}	Peak Pulse Power	t_P = 8/20 μs	-	350	W
I_{PPM}	Rated Peak Pulse Current	t_P = 8/20 μs	-	20	A
T_A	Ambient Temperature Range	-	-55	125	℃
T_{STRG}	Storage Temperature Range	-	-55	150	℃

7. Electrical Characteristics(T_A = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V_{RWM}	Reverse Working Voltage	T_A= 25 °C	-	-	3.3	V
V_{BR}	Breakdown Voltage	I_R = 1mA; T_A= 25 °C	4.0	-	-	V
I_R	Reverse Leakage Current	V_{RWM} = 3.3V; T_A = 25 °C	-	-	0.1	μA
V_C	Clamping Voltage	I_{PP}=1A, t_P=8/20μs	-	-	6.5	V
		I_{PP}=20A, t_P=8/20μs	-	-	17.5	V
C_J	Junction Capacitance	V_R = 0V, f = 1 MHz	-	1.0	-	pF

8. Typical Characteristics

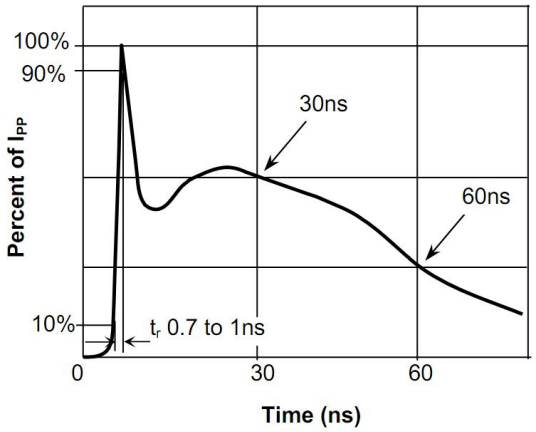


Fig.1 Pulse Waveform-ESD(IEC61000-4-2)

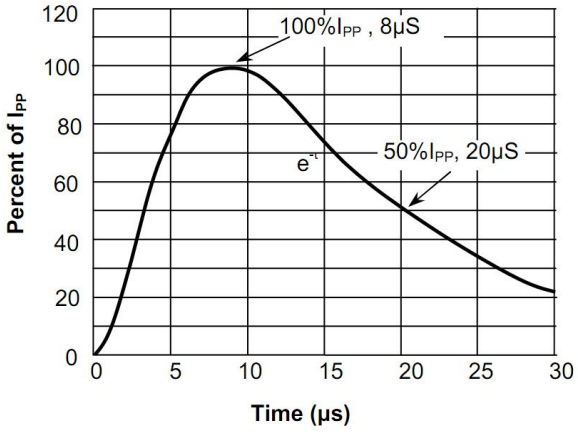


Fig.2 Pulse Waveform-8/20μs

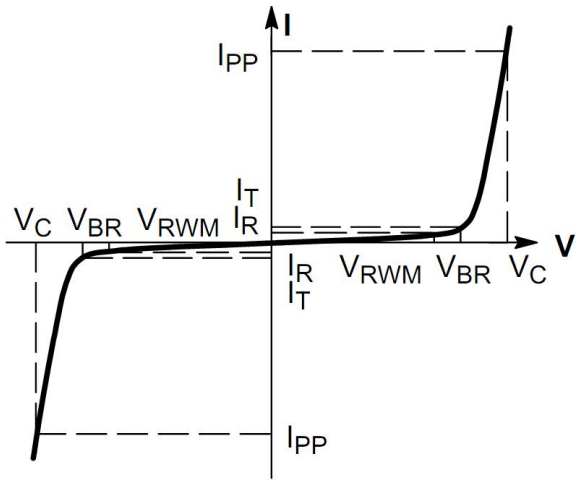


Fig.3 V-I Characteristics for Bidirectional Diode

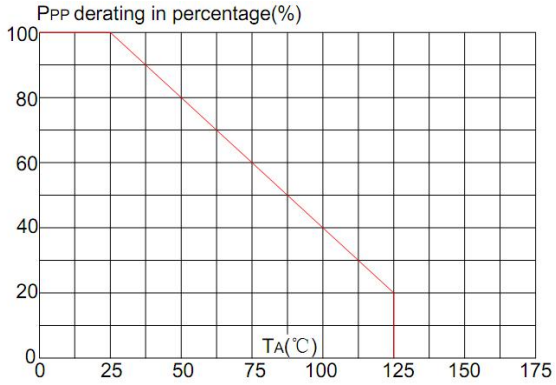
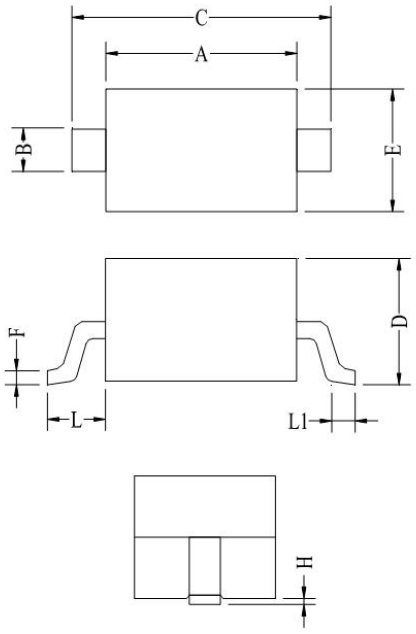


Fig.4 Power Derating Curve

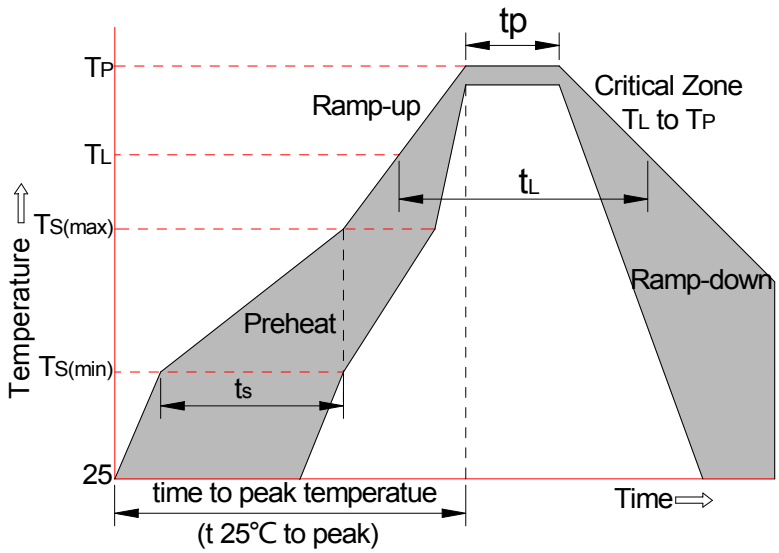
9. Package Outline Dimensions

SOD323 Package Outline



Symbol	Dimensions in millimeters	
	Min	Max
A	1.60	1.80
B	0.25	0.35
C	2.50	2.70
D	0.00	1.00
E	1.20	1.40
F	0.08	0.15
L	0.475REF	
L1	0.25	0.40
H	0.00	0.10

10. Soldering Parameters



Reflow Condition		Pb-Free Assembly
Pre-heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
xTime 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C