

**DESCRIPTION**

The SE3D15B3.3MA is a low capacitance transient voltage suppressor array , designed to protect applications such as portable electronics and SMART phones. This series is rated at 350 Watts for an 8/20μs waveshape.

The SE3D15B3.3MA meets IEC 61000-4-2 (ESD) and IEC 61000-4-4 (EFT) requirements. At higher operating frequencies or faster edge rates, insertion loss and signal integrity are a major concern. The SE3D15B3.3MA offers a low capacitance and low leakage current in a miniature SOD-323 package.

**FEATURES**

- >350 Watts Peak Pulse Power per Line (tp=8/20μs)
- >Protects One Power or I/O Port
- >Low clamping voltage
- >Low leakage current

**APPLICATIONS**

- >Ethernet - 10/100/1000 Base T
- >Cellular Phones
- >I<sup>2</sup>C Bus Protection
- >Parallel & Serial Port Protection
- >Personal Digital Assistant (PDA)
- >Microcontroller Input Protection
- >WAN/LAN Equipment

**IEC COMPATIBILITY**

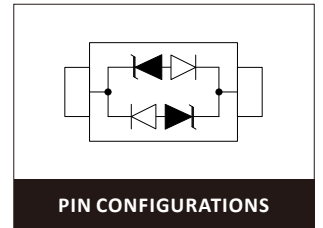
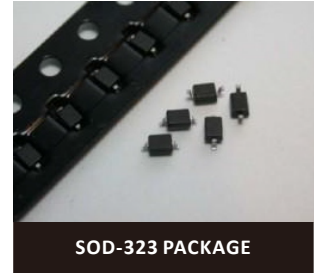
- >IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- >IEC61000-4-4 (EFT) 40A (5/50ns)

**MAXIMUM RATINGS @ 25°C UNLESS OTHERWISE SPECIFIED**

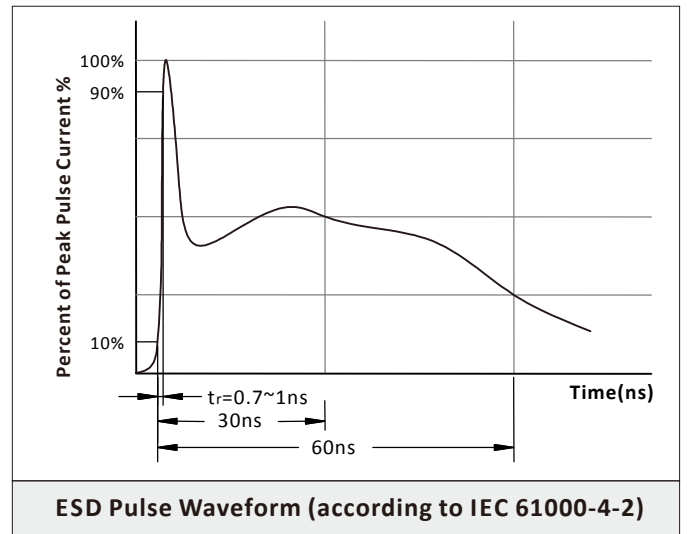
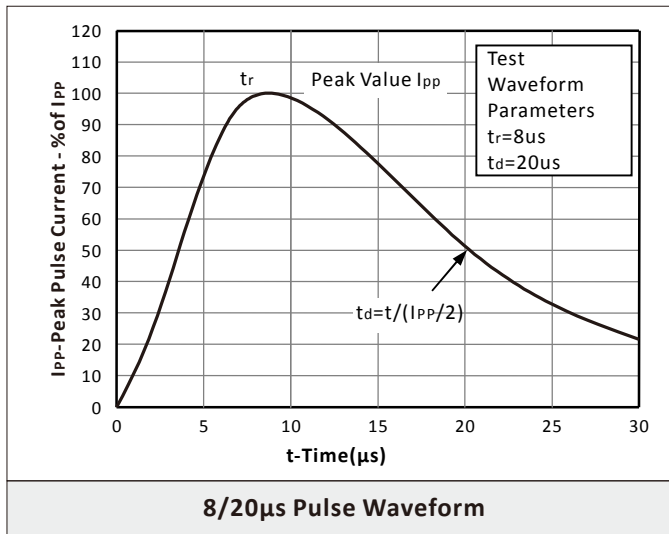
PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp=8/20μs waveform)	PPP	350	Watts
Operating Temperature Range	TJ	-55~125	°C
Storage Temperature Range	TSTG	-55~150	°C

**ELECTRICAL CHARACTERISTICS PER LINE @ 25°C UNLESS OTHERWISE SPECIFIED**

PART NUMBER	DEVICE MARKING	V <sub>RWM</sub>	V <sub>B</sub>	I <sub>T</sub>	V <sub>C @1A</sub>	V <sub>C</sub>		I <sub>R</sub>	C <sub>T</sub>
		(V) Max.	(V) Min.	(mA)	Max.	Max.	@A	(μA) Max.	(pF) Typ.
SE3D15B3.3MA	CC	3.3	4.0	1	6	18.0	22.0	1.0	0.8

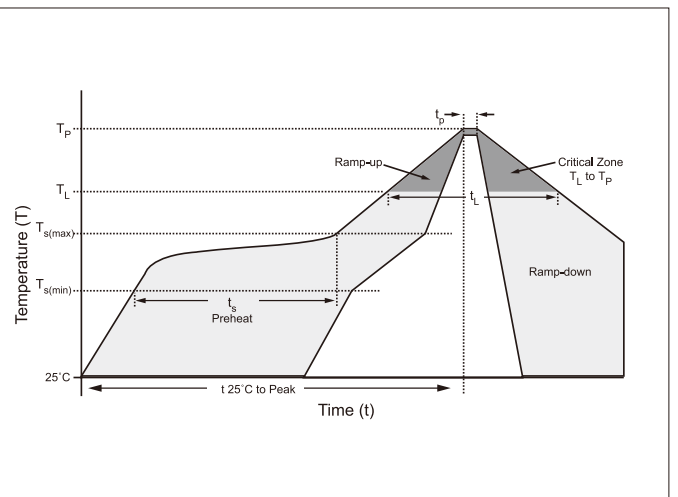


**CHARACTERISTIC CURVES**



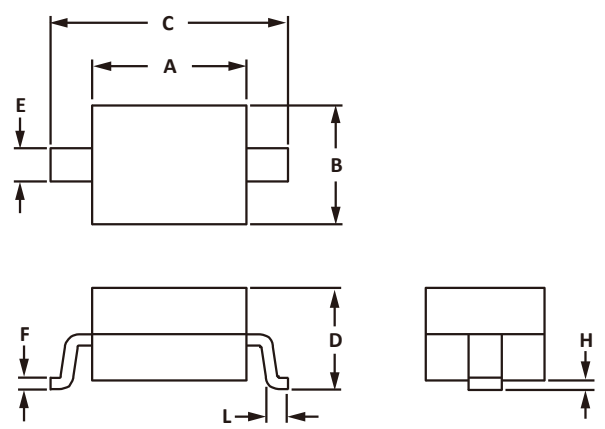
**REFLOW PROFILE**

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (min to max) (ts)	60 – 180 secs
Average ramp up rate (Liquidus Temp (TL) to peak)		3°C/second max
Ts(max)to TL - Ramp-up Rate		3°C/second max
Reflow	Temperature (TL) (Liquidus)	217°C
	Time (min to max) (tl)	60 – 150 seconds
Peak Temperature (Tp)		260°C
Time within 5°C of actual peak temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (Tp)		8 minutes Max.
Do not exceed		260°C



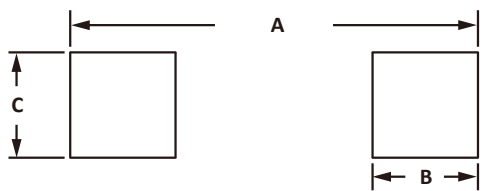
**SOD-323 PACKAGE INFORMATION**

OUTLINED DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-



**RECOMMENDED PAD LAYOUT DIMENSION**

PAD LAYOUT DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.87	3.12	0.113	0.123
B	0.66	0.91	0.026	0.036
C	0.66	0.91	0.026	0.036



**ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
SE3D15B3.3MA	SOD-323	3000PCS	7"

## **CONTACT US**

### **Headquarters**

Room 43A, Block C, Electronic and Technology Building, Shennan Road, Futian District, Shenzhen  
China

### **Hotline**

+86-0755-83239646

### **Web**

[Http://www.szshaixin.com](http://www.szshaixin.com)

### **By Telephone**

General: +86-0755-83239646

### **By Fax**

+86-0755-83239644

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