

**SEBLC03 thru SEBLC24C**  
**Ultralow Capacitance TVS Array**

**General Description**

The Ultralow Capacitance Transient Voltage Suppressors are designed to low voltage, integrated circuits from transients caused by electrostatic discharge (ESD), electrical fast transients (EFT), Surge and other induced voltages.

**Applications**

- Ethernet – 10/100/1000 Base T
- Cellular Phones
- Handheld – Wireless Systems
- Personal Digital Assistant(PDA)
- USB Interface

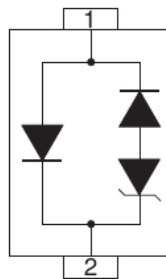
**Features**

- 350 W Peak Pulse Power per Line (tp=8/20μs)
  - Unidirectional & Bidirectional Configurations
  - Replacement for MLV (0805)
  - Protects One Power or I/O Port
  - ESD Protection > 40 kilovolts
  - Low Clamping Voltage
  - Available in Multiple Voltage Type Ranging from 3V to 24V
  - Ultra Low Capacitance:3pF Typical
  - RoHS Compliant in Lead-Free Versions
- IEC61000-4-2(ESD) 15kV(air), 8kV(Contact)**  
**IEC61000-4-4(EFT) 40A(5/50ns)**  
**IEC61000-4-5(Surge)24A(8/20us),Level2(Line-G round)& Level 2(Line- Line)**

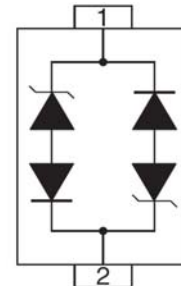
**SOD-323**



**UNIDIRECTIONAL**



**BIDIRECTIONAL**



**Absolute Maximum Ratings @ 25°C Unless Otherwise Specified**

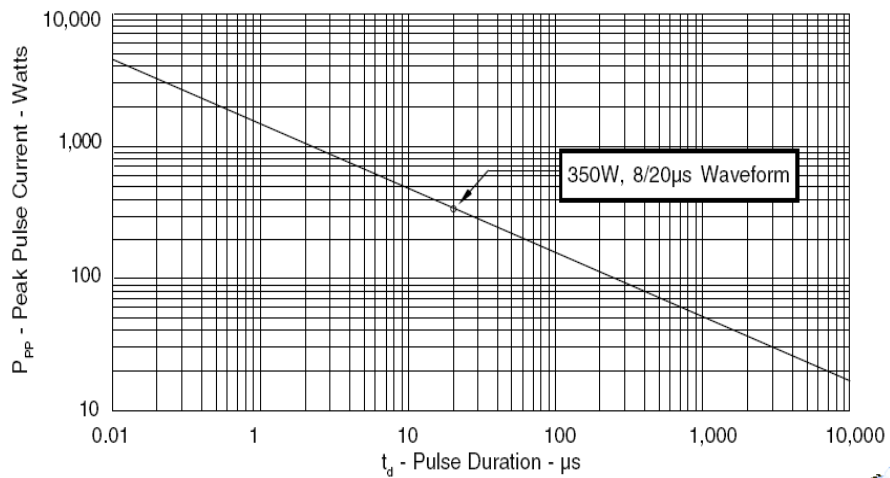
Parameter	Symbol	Value	Units
Peak Pulse Power (tp = 8/20μs) - See Fig1.	P <sub>PP</sub>	350	W
Storage Temperature Range	T <sub>STG</sub>	-55 to 150	°C
Operating Junction Temperature Range	T <sub>J</sub>	-55 to 150	°C

**Electrical Characteristics Per line @ 25°C Unless Otherwise Specified**

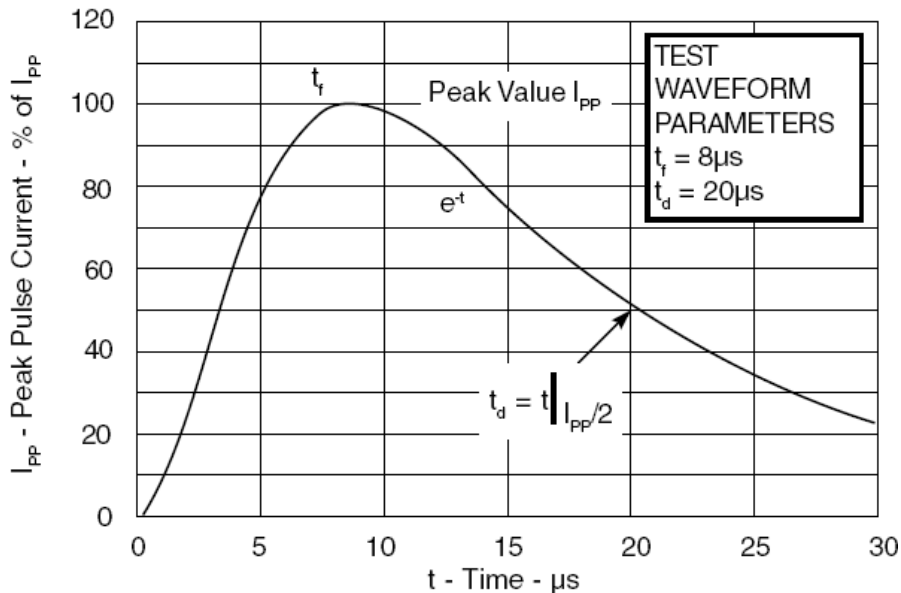
Part Numbers	V <sub>BR</sub>			I <sub>T</sub>	V <sub>RM</sub>	I <sub>RM</sub>	V <sub>F</sub>	I <sub>F</sub>	C
	Min.	Typ.	Max.				Max.		Typ. 0v bias
	V	V	V				V		pF
SEBLC03	3.3	3.8	4.5	1	3	1	1.25	200	3

# SEBLC03 thru SEBLC24C

SEBLC03C	3.3	3.8	4.5	1	3	1	1.25	200	3
SEBLC05	6.1	6.7	7.2	1	5	1	1.25	200	3
SEBLC05C	6.1	6.7	7.2	1	5	1	1.25	200	3
SEBLC08	8.6	9.5	10.2	1	8	1	1.25	200	3
SEBLC08C	8.6	9.5	10.2	1	8	1	1.25	200	3
SEBLC12	13.5	14.6	15.7	1	12	1	1.25	200	3
SEBLC12C	13.5	14.6	15.7	1	12	1	1.25	200	3
SEBLC15	16.7	17.8	18.9	1	15	1	1.25	200	3
SEBLC15C	16.7	17.8	18.9	1	15	1	1.25	200	3
SEBLC24	26.7	27.8	28.9	1	24	1	1.25	200	3
SEBLC24C	26.7	27.8	28.9	1	24	1	1.25	200	3



**Fig1. Peak Pulse Power VS Pulse Time**

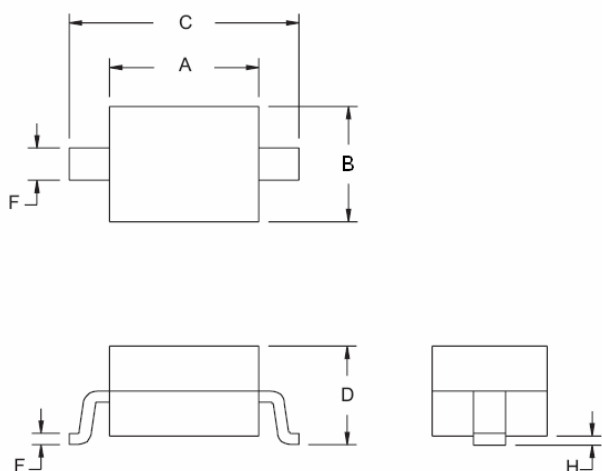


**Fig2. Pause Wave Form**

# SEBLC03 thru SEBLC24C

## SOD-323 Mechanical Data

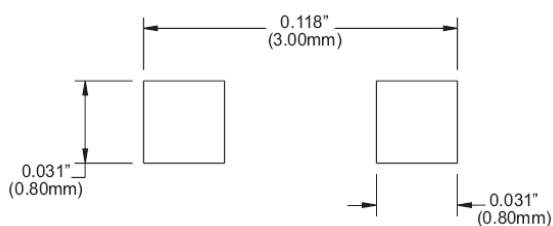
### Package Outline



### SOD-323 Package



### Mounting Pad



### Package 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	0.92	1.10	0.036	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

### Notes:

1. Controlling Dimensions in Millimeters.
2. Dimensions are exclusive of mold flash and metal burns,

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