

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

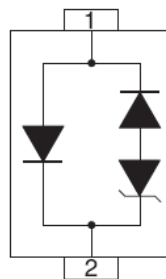
Features

- 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)
Level 2(Line-Ground)& Level 2(Line- Line)

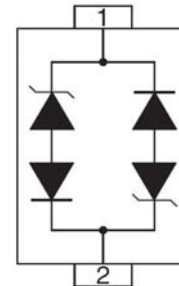
SOD-323



UNIDIRECTIONAL



BIDIRECTIONAL



Absolute Maximum Ratings @ 25°C Unless Otherwise Specified

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

Electrical Characteristics Per line @ 25°C Unless Otherwise Specified

Part Numbers	V _{BR}			I _T	V _{RM}	I _{RM}	V _F	I _F	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	1

SEBLC03 thru SEBLC24C

SEBLC03C	3.3	3.8	4.5	1	3	1	1.25	200	1
SEBLC05	6.1	6.7	7.2	1	5	1	1.25	200	1
SEBLC05C	6.1	6.7	7.2	1	5	1	1.25	200	1
SEBLC12	13.5	14.6	15.7	1	12	1	1.25	200	1
SEBLC12C	13.5	14.6	15.7	1	12	1	1.25	200	1
SEBLC15	16.7	17.8	18.9	1	15	1	1.25	200	1
SEBLC15C	16.7	17.8	18.9	1	15	1	1.25	200	1
SEBLC18	19.1	20.0	20.8	1	18	1	1.25	200	1
SEBLC18C	19.1	20.0	20.8	1	18	1	1.25	200	1
SEBLC24	26.7	27.8	28.9	1	24	1	1.25	200	1
SEBLC24C	26.7	27.8	28.9	1	24	1	1.25	200	1

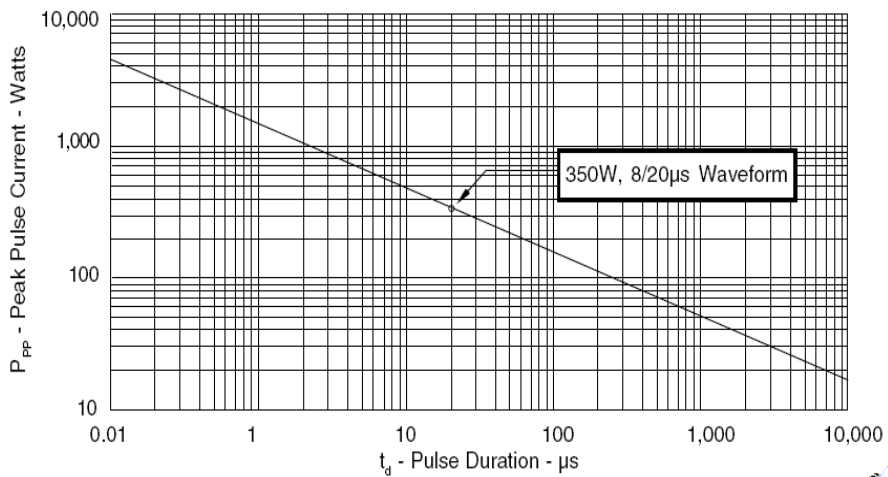
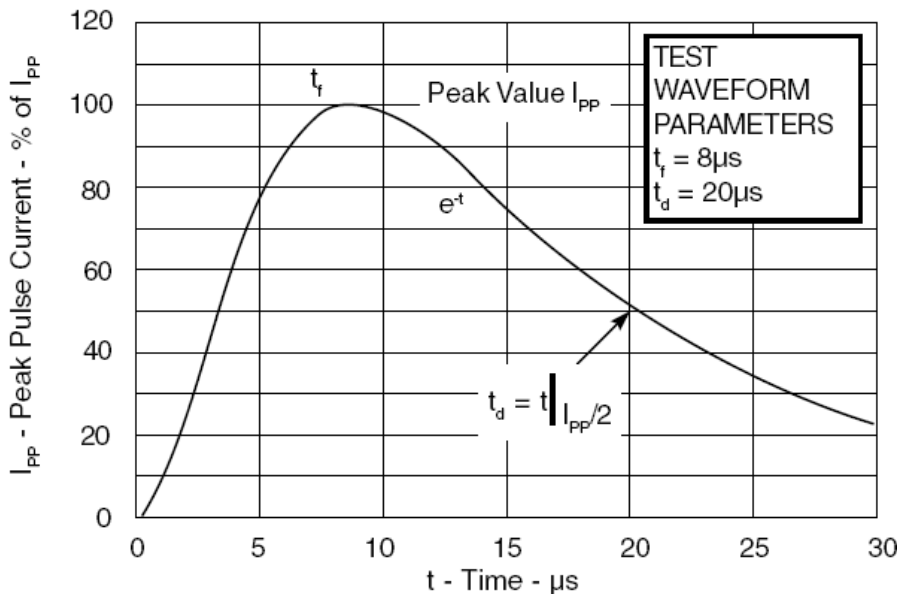


Fig1. Peak Pulse Power VS Pulse Time

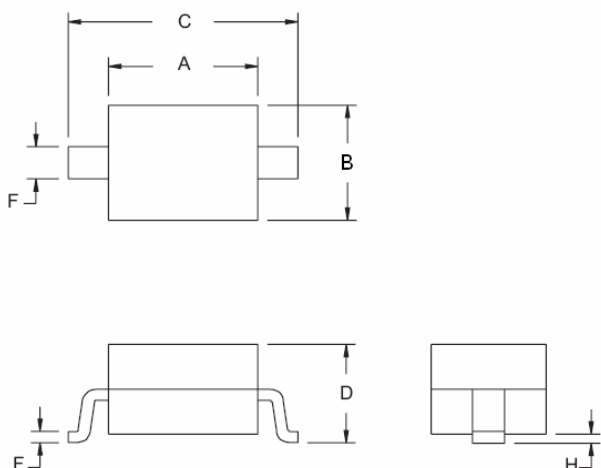


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Fig2. Pause Wave Form

SOD-323 Mechanical Data

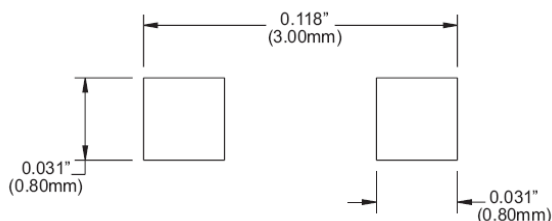
Package Outline



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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