

## Transient Voltage Suppressors for ESD Protection

#### DESCRIPTION

The SLESD3Z5VOC is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium.

This device has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events),and EFT (electrical fast transients).

#### **APPLICATIONS**

- ♦ High Speed Line :USB1.0/2.0, VGA, DVI, SDI,
- ♦ Serial and Parallel Ports
- Notebooks, Desktops, Servers
- ♦Projection TV
- ♦ Cellular handsets and accessories
- $\diamond$ Portable instrumentation
- ♦Peripherals

#### **FEATURES**

♦IEC61000-4-2 (ESD) ±15kV (air),

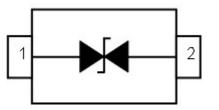
±8kV (contact)

- ♦IEC61000-4-4 (EFT) 40A (5/50ηs)
- $\diamond$  Peak power dissipation: 200W (8/20µs)
- ♦Protects one directional I/O line
- ♦Low clamping voltage
- ♦Working voltages : 5V
- ♦Low leakage current

#### **MACHANICAL DATA**

- ♦SOD-323 package
- ♦Packaging: Tape and Reel
- ♦Reel size: 7 inch

#### **PIN CONFIGURATION**



### PACKAGE OUTLINE

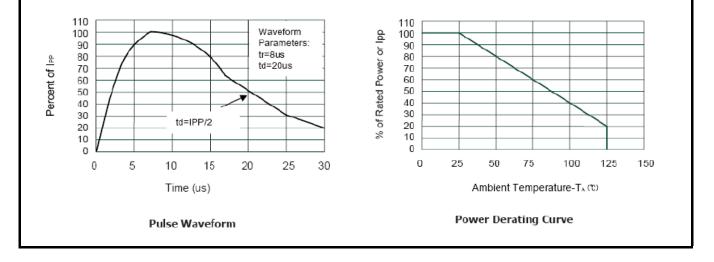




ABSOLUTE N	IAXIMUM RATING		
Symbol	Parameter	Value	Units
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	±15 ±8	kV
P <sub>PP</sub>	Peak Pulse Power (8/20µs)	100	W
Т <sub>ОРТ</sub>	Operating Temperature	-40~150	°C
T <sub>STG</sub>	Storage Temperature	-40~150	°C

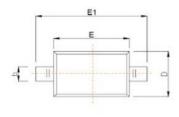
ELECTRI	CAL CHARACTERISTICS	S (Tamb=25°C)							
Symbol	Parameter	Test Condition	Min	Тур	Max	Units			
V <sub>RWM</sub>	Reverse Working Voltage				5.0	V			
V <sub>BR</sub>	Reverse Breakdown Voltage	I <sub>T</sub> = 1mA	5.6		7.8	V			
I <sub>R</sub>	Reverse Leakage Current	V <sub>RWM</sub> = 5V			1.0	μA			
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> = 5A, t <sub>p</sub> = 8/20μs			11.6	V			
Vc	Clamping Voltage	$I_{PPmax} = 8A$ , $t_p = 8/20\mu s$			16.0	V			
CJ	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz		10	15	pF			

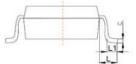
## **ELECTRICAL CHARACTERISTICS CURVE**

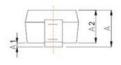




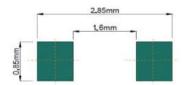
# SOD-323 PACKAGE OUTLINE DIMENSIONS







Cumhal	Dimensions In Millimeters		
Symbol	Min	Max	
A		1.00	
A1	0.000	0.100	
A2	0.800	0.900	
b	0.250	0.350	
с	0.080	0.150	
D	1.200	1.400	
E	1.600	1.800	
E1	2.500	2.700	
e	1.800	2.040	
L	0.475 REF		
L1	0.250	0.400	
θ	0°	8°	



**Recommended Pad outline**