

ESD3Z5V0C

ESD3Z5V0C Transient Voltage Suppressors for ESD protection

General description

Transient Voltage Suppressors for ESD protection in a SOD-323 Package.

FEATURES

- Protects one I/O line
- Low clamping voltage
- Working voltages : 5V
- Low leakage current
- Peak power dissipation: 128W (8/20 μ s)

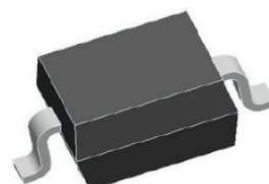
APPLICATIONS:

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

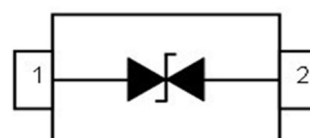
MACHANICAL DATA

- SOD-323 package
- Terminals: Tin plated, solderable per MIL-STD-750, method 2026

Package Outline



SOD-323 Package



Device Marking:

Device Type	Marking
ESD3Z5V0C	3M or AC

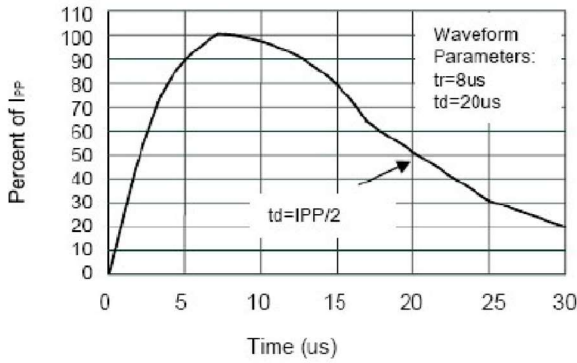
ABSOLUTE MAXIMUM RATING

Symbol	Parameter	Value	Units
V _{ESD}	ESD per IEC 61000-4-2 (Air)	±30	kV
	ESD per IEC 61000-4-2 (Contact)	±30	
P _{PP}	Peak Pulse Power (8/20 μ s)	128	W
T _{OPT}	Operating Temperature	-40~150	°C
T _{STG}	Storage Temperature	-40~150	°C

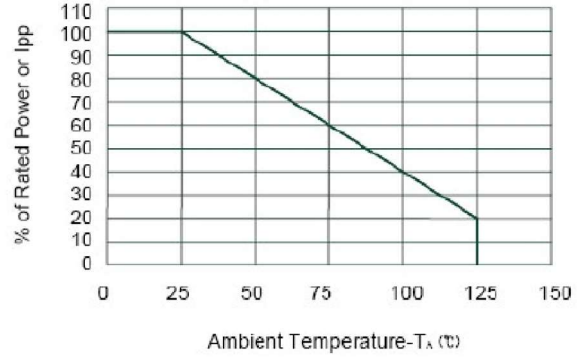
ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Working Voltage				5.0	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	5.6		7.8	V
I _R	Reverse Leakage Current	V _{RWM} = 5V			1.0	μ A
V _C	Clamping Voltage	I _{PP} = 5A, t _p = 8/20 μ s			11.6	V
V _C	Clamping Voltage	I _{PPmax} = 8A, t _p = 8/20 μ s			16.0	V
C _J	Junction Capacitance	V _R = 0V, f = 1MHz			15	pF

Typical Characteristic:

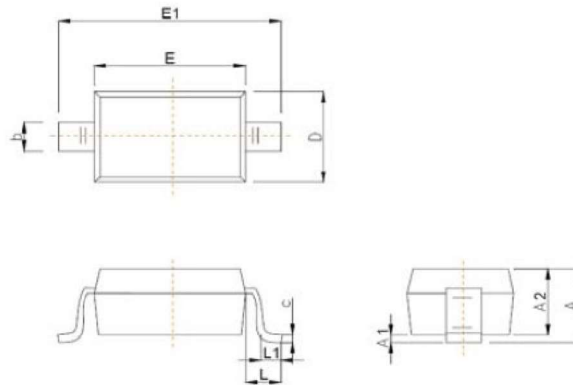


Pulse Waveform

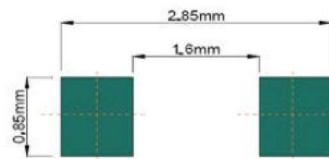


Power Derating Curve

SOD-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions in Millimeters	
	Min	Max
A		1.00
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	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

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