

Transient Voltage Suppressors ESD Protection Diode

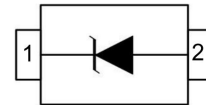
General description

Silicon Diode in a SOD-523 Plastic Package.

SOD-523 Package

FEATURES

- Working Voltage: 24V
 - Low Leakage Current
 - IEC61000-4-2 Level 4 ESD Protection
 - RoHS Compliant
 - Green EMC
- Matte Tin(Sn) Lead Finish



Device Marking: 5S

Absolute Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Total Power Dissipation on FR-5 Board	P _D	150	mW
Storage Temperature	T _{stg}	-55 to +150	°C
Operating Temperature	T _{OPT}	-55 to +125	°C
IEC61000-4-2 Air IEC61000-4-2 Contact	V _{ESD}	±15 ± 8	KV

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Working Voltage				24	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	26			V
I _R	Reverse Leakage Current	V _{RWM} = 24V			1	μA
V _C	Clamping Voltage	I _{PP} = 1A, t _p = 8/20μs			35	V
C _J	Junction Capacitance	V _R = 0V, f = 1MHz			50	pF



ESD5Z24

Ratings And Characteristic Curves

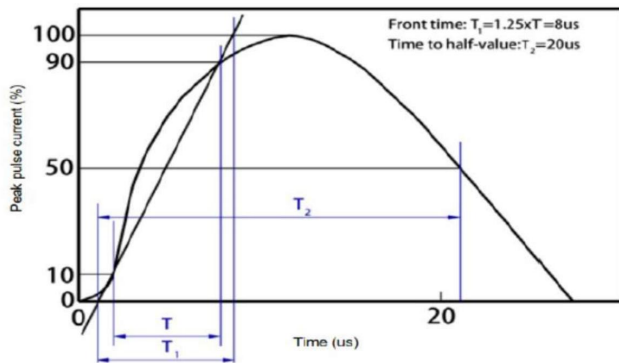


Fig 1 8/20us Waveform per IEC610004-5

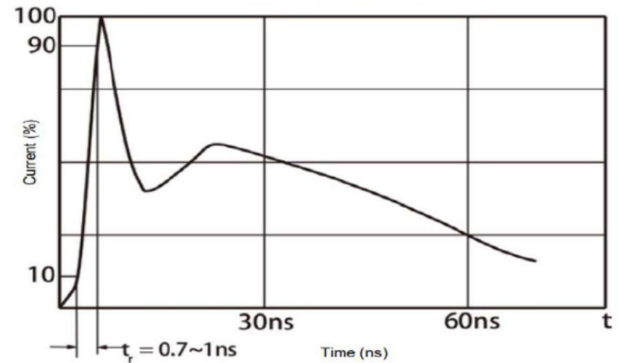


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

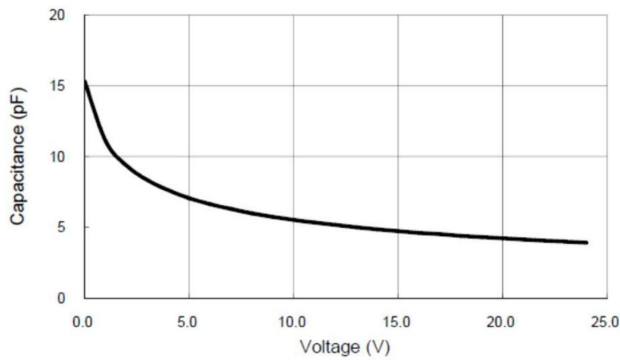


Fig 3 Voltage vs Capacitance

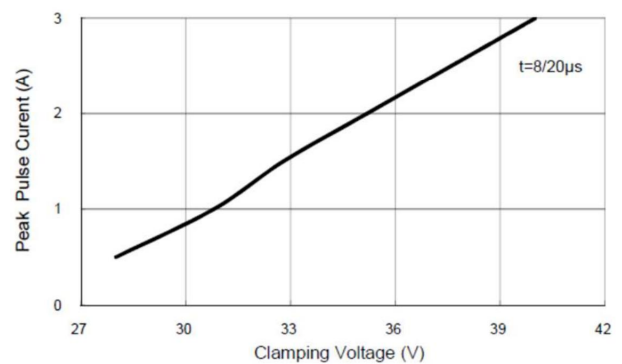
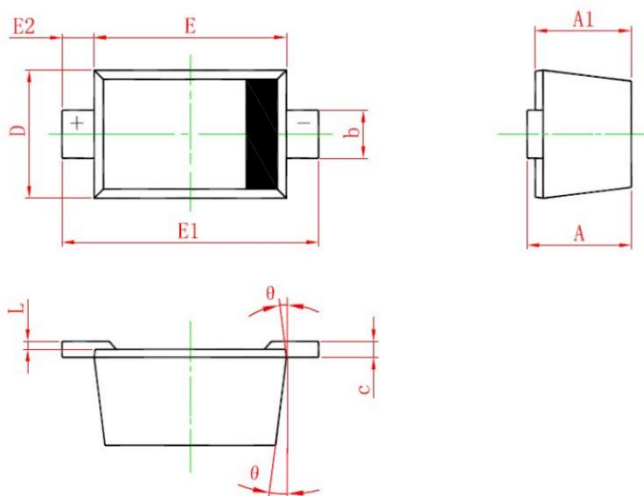


Fig 4 Clamping Voltage vs Peak Pulse Current

SOD-523 PACKAGE OUTLINE Plastic surface mounted package



Symbol	Dimensions in millimeters		Dimensions in inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

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