

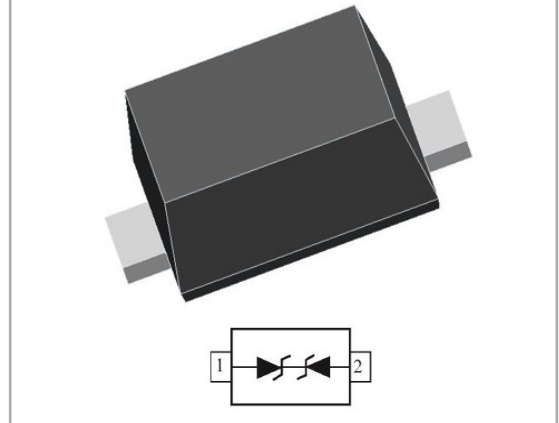
■ Features

- 200 Watts Peak Pulse Power per (tp=8/20us)
- Low clamping voltage
- Low leakage current
- Response Time is Typically <1ns
- IEC61000-4-2 Level 4 ESD protection
- IEC61000-4-4 Level 4 EFT Protection

■ Mechanical Data

- SOD-523 package
- Molding compound flammability rating: UL 94V-0
- High temperature soldering guaranteed: 260 °C / 10s

SOD-523



■ Absolute Maximum Rating($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameters	Symbol	Value	Unit
ESD per IEC61000-4-2(Air) ESD per IEC61000-4-2(Contact)	V_{ESD}	± 15 ± 8	kV
Electrostatic Discharge IEC 61000-4-4(EFT)		5	A
ESD Voltage per human body model		16	kV
ESD Voltage per machine model		400	V
Total Power Dissipation on FR-5 Board (note 1)@ $T_a=25^\circ\text{C}$	P_{PP}	200	W
Maximum Junction temperature	T_J	150	$^\circ\text{C}$
Operating Temperature	T_{OPT}	-55-+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55-+150	$^\circ\text{C}$
Lead Soldering Temperature-Maximum (10 second Duration)	T_L	260(10 sec.)	$^\circ\text{C}$

These ratings are limiting values above which the serviceability of the diode may be impaired
 Note 1. FR-5=1.0x0.75x0.62 in.



■ Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

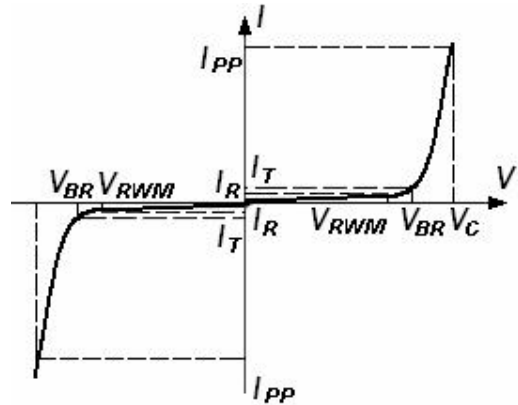
$V_F = 0.9\text{V Max. @ } I_F = 10\text{mA}$ for all types

DEVICE	MARKING	V_{RWM}	$I_R(\mu\text{A})$	$V_{BR}(\text{V})$		I_T	$V_C @ I_{PP} = 1\text{A}$	$V_C(\text{V})(\text{Note1})$	$I_{PP}(\text{A})$	Ppk	C
		(V)	@ V_{RWM}	@ $I_T(\text{note2})$	(mA)						
		Max	Max	Min	Max		Typ.	Max	Max	Max	Typ
ESD5Z5.0C	5C	5.0	1		5.6	1.0	11.6	18	5	175	25

ESD5Z5.0C

■ Electrical Parameters ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current



■ Typical Characteristics

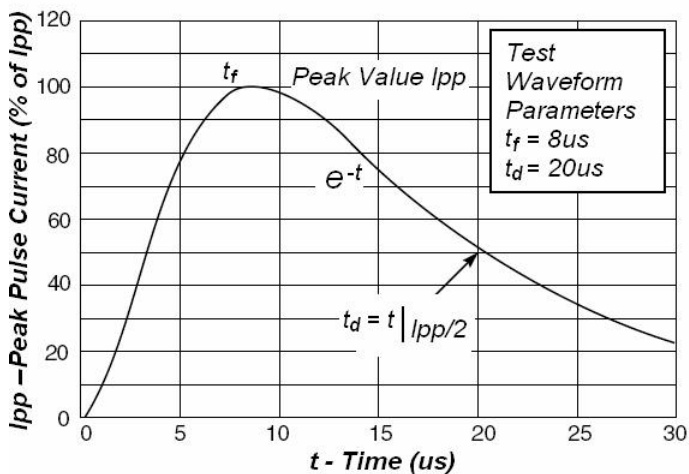


Fig1.Pulse Waveform

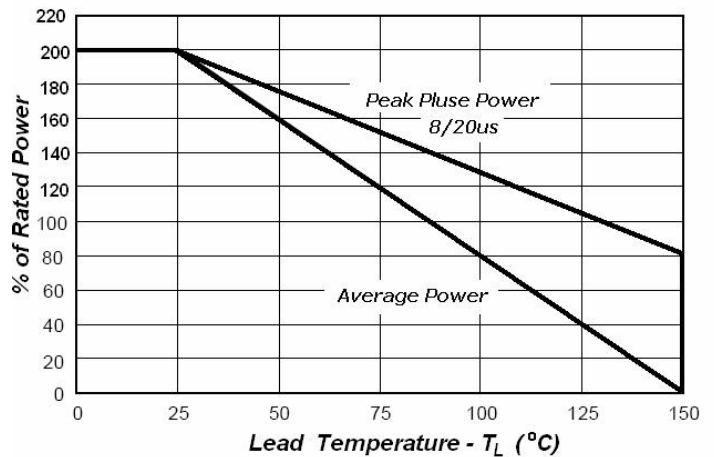
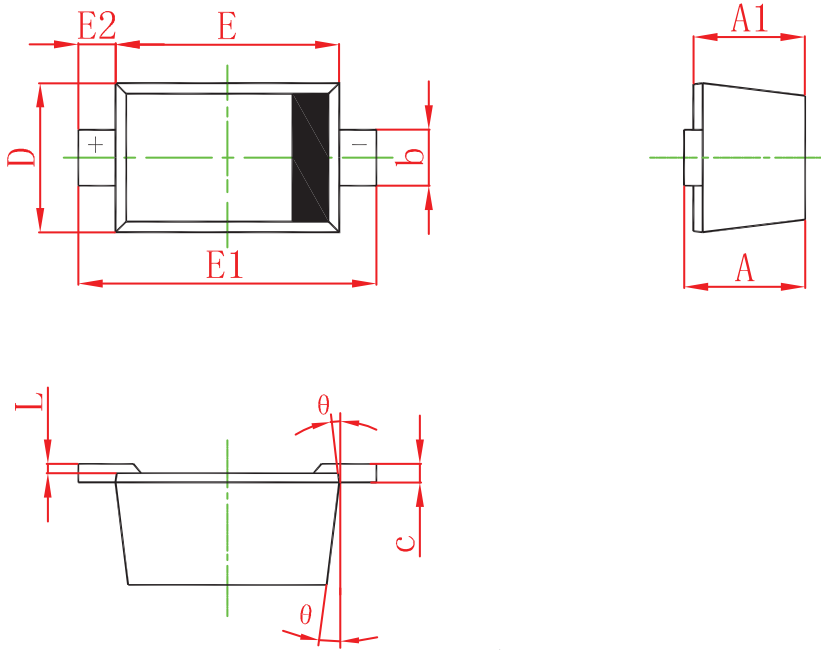


Fig2. Power Derating



■ SOD-523 Package Outline Dimensions



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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