

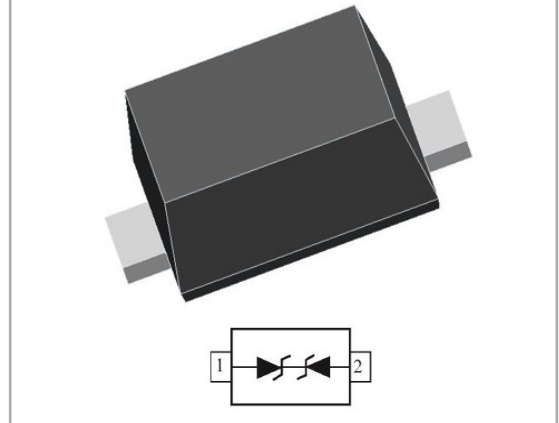
## ■ Features

- 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)	$V_{ESD}$	$\pm 15$ $\pm 8$	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

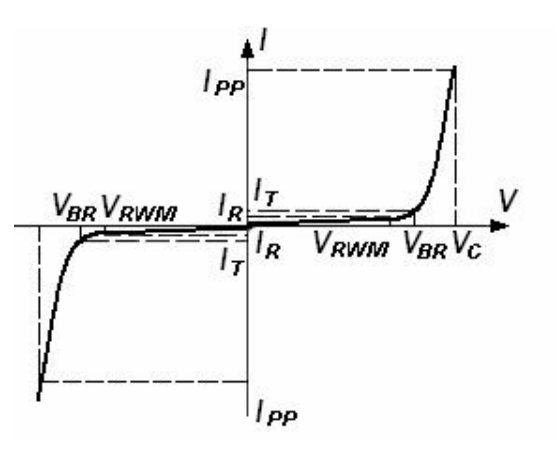
DEVICE	MARKING	$V_{RWM}$	$I_R(\mu\text{A})$	$V_{BR}(\text{V})$		$I_T$	$V_C@I_{PP}=1\text{A}$	$V_C(\text{V})(\text{Note1})$	$I_{PP}(\text{A})$	Ppk	C
		(V)	@ $V_{RWM}$	@ $I_T(\text{note2})$	(mA)						
		Max	Max	Min	Max		Typ.	Max	Max	Max	Typ
ESD5Z3.3C	CT	3.3	10.0	4.0	7.0	1.0	8	15	5	120	50

Note: 1. Surge current waveform per Figure 1.

2.  $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of  $25^\circ\text{C}$

■ 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

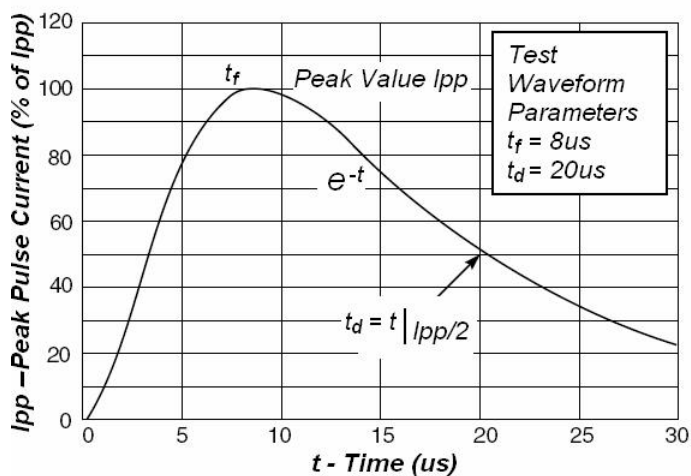


Fig1.Pulse Waveform

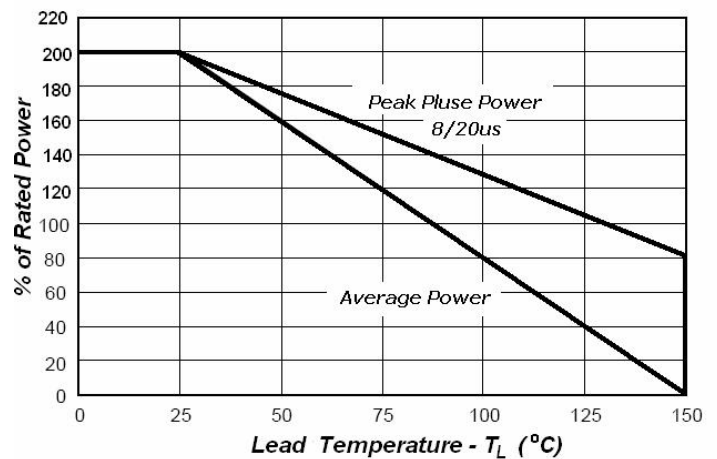
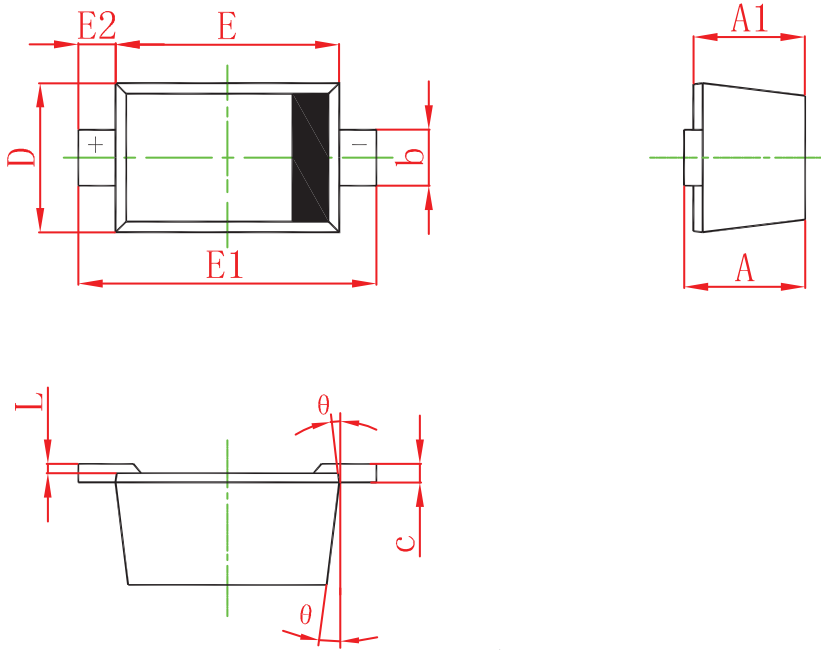


Fig2. Power vs. Temperature \*



■ 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	