

SEZ52C5V1-5
Silicon Planar Zener Diodes

Revision:B

General Description

Silicon planar zener diode in a small plastic SMD SOD-523 package.

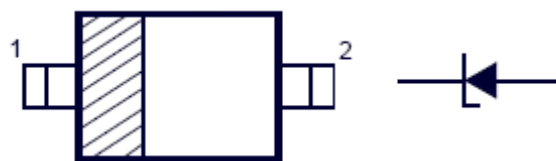
Features

- Total power dissipation: max. 500mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$

Functional diagram



SOD-523



Note: 1-Cathode;2-Anode

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Symbol	Parameter	Value	Unit
	Zener Current see Table "Characteristics"		
P_{tot}	Power Dissipation	500	mW
T_j	Junction Temperature	175	$^\circ\text{C}$
T_s	Storage Temperature Range	-55 to +125	$^\circ\text{C}$

Characteristics at $T_{amb}=25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	---	---	0.3	K/mW
Forward Voltage at $I_F=100\text{mA}$	V_F	---	---	0.9	V

SEZ52C5V1-5

Electrical Characteristics

Type	Zener Voltage Range			Dynamic Impedance		Revers Leakage Current		Temp. coefficient of Zener Voltage
	V_{znom}	I_{ZT} for V_{ZT}		$Z_Z(\text{Max})$ at I_Z		$I_R(\text{Max})$ at V_R		TKvz %/K
	V	mA	V	Ω	mA	μA	V	
SEZ52C5V1-5	5.1	5	5.1...5.6	60	5	1	4	-0.02...+0.02

- 1) V_Z is tested with pulses (20 ms).
- 2) Z_Z is measured at I_Z by given a very small A.C. current signal.

Breakdown Characteristics $T_J = \text{constant}$ (pulse)

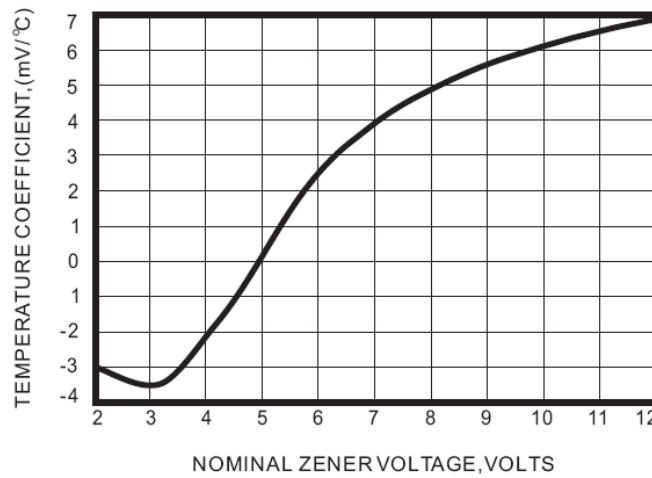


Fig 1

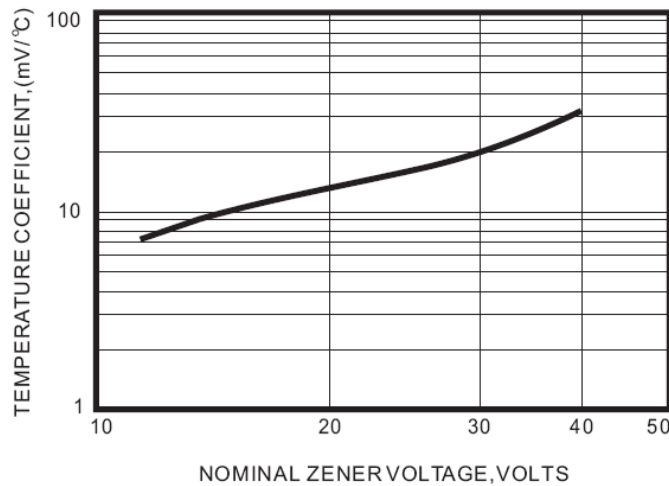
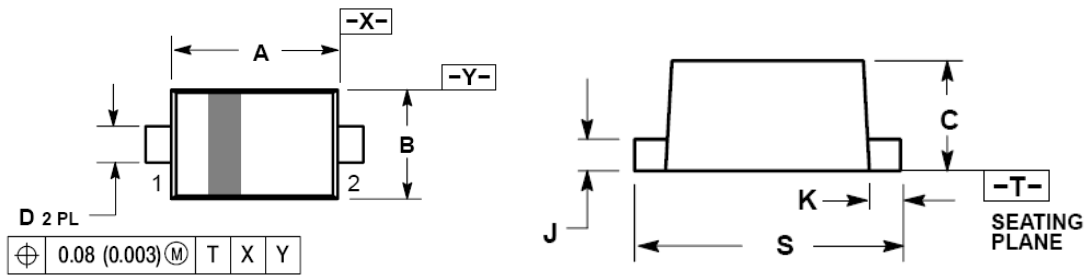


Fig 2

SEZ52C5V1-5

SOD-523 Mechanical Data



Dim	Millimeters			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.10	1.20	1.30	0.043	0.047	0.051
B	0.70	0.80	0.90	0.028	0.032	0.035
C	0.50	0.60	0.70	0.020	0.024	0.028
D	0.25	0.30	0.35	0.010	0.012	0.014
J	0.07	0.14	0.20	0.0028	0.0055	0.0079
K	0.15	0.20	0.25	0.006	0.008	0.010
S	1.50	1.60	1.70	0.059	0.063	0.067

The SINO-IC logo is a registered trademark of ShangHai Sino-IC Microelectronics Co., Ltd.

© 2005 SINO-IC – Printed in China – All rights reserved.

SHANGHAI SINO-IC MICROELECTRONICS CO., LTD

Add: Building 3, Room 3401-03, No.200 Zhangheng Road, ZhangJiang Hi-Tech Park, Pudong, Shanghai 201203, China

Phone: +86-21-33932402 33932403 33932405 33933508 33933608

Fax: +86-21-33932401

Email: szrxw002@126.com

Website: <http://www.sino-ic.net>