

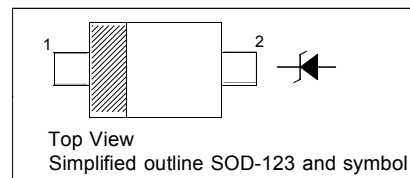
Silicon Planar Zener Diodes

Features

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	340	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V



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

Type	Zener Voltage Range ¹⁾			Dynamic Impedance ²⁾		Reverse Leakage Current	
	V_{znom} V	I_{ZT} mA	for V_{ZT} V	Z_{ZT} (Max.) Ω	at I_Z mA	I_R (Max.) μA	at V_R V
BZT52C2V0	2.0	5	1.8...2.15	100	5	120	0.5
BZT52C2V2	2.2	5	2.08...2.33	100	5	120	0.7
BZT52C2V4	2.4	5	2.28...2.56	100	5	120	1
BZT52C2V7	2.7	5	2.5...2.9	110	5	120	1
BZT52C3V0	3.0	5	2.8...3.2	120	5	50	1
BZT52C3V3	3.3	5	3.1...3.5	130	5	20	1
BZT52C3V6	3.6	5	3.4...3.8	130	5	10	1
BZT52C3V9	3.9	5	3.7...4.1	130	5	5	1
BZT52C4V3	4.3	5	4...4.6	130	5	5	1
BZT52C4V7	4.7	5	4.4...5	130	5	2	1
BZT52C5V1	5.1	5	4.8...5.4	130	5	2	1.5
BZT52C5V6	5.6	5	5.2...6	80	5	1	2.5
BZT52C6V2	6.2	5	5.8...6.6	50	5	1	3
BZT52C6V8	6.8	5	6.4...7.2	30	5	0.5	3.5
BZT52C7V5	7.5	5	7...7.9	30	5	0.5	4
BZT52C8V2	8.2	5	7.7...8.7	30	5	0.5	5
BZT52C9V1	9.1	5	8.5...9.6	30	5	0.5	6
BZT52C10	10	5	9.4...10.6	30	5	0.1	7
BZT52C11	11	5	10.4...11.6	30	5	0.1	8
BZT52C12	12	5	11.4...12.7	35	5	0.1	9
BZT52C13	13	5	12.4...14.1	35	5	0.1	10
BZT52C15	15	5	13.8...15.6	40	5	0.1	11
BZT52C16	16	5	15.3...17.1	40	5	0.1	12
BZT52C18	18	5	16.8...19.1	45	5	0.1	13
BZT52C20	20	5	18.8...21.2	50	5	0.1	15
BZT52C22	22	5	20.8...23.3	55	5	0.1	17
BZT52C24	24	5	22.8...25.6	60	5	0.1	19
BZT52C27	27	5	25.1...28.9	70	2	0.1	21
BZT52C30	30	5	28...32	80	2	0.1	23
BZT52C33	33	5	31...35	80	2	0.1	25
BZT52C36	36	5	34...38	90	2	0.1	27
BZT52C39	39	2.5	37...41	100	2	2	30
BZT52C43	43	2.5	40...46	130	2	2	33
BZT52C47	47	2.5	44...50	150	2	2	36
BZT52C51	51	2.5	48...54	180	2	1	39
BZT52C56	56	2.5	52...60	180	2	1	43
BZT52C62	62	2.5	58...66	200	2	0.2	47
BZT52C68	68	2.5	64...72	250	2	0.2	52
BZT52C75	75	2.5	70...79	300	2	0.2	57

¹⁾ V_Z is tested with pulses (20 ms).

²⁾ Z_{ZT} is measured at I_Z by given a very small A.C. current signal.

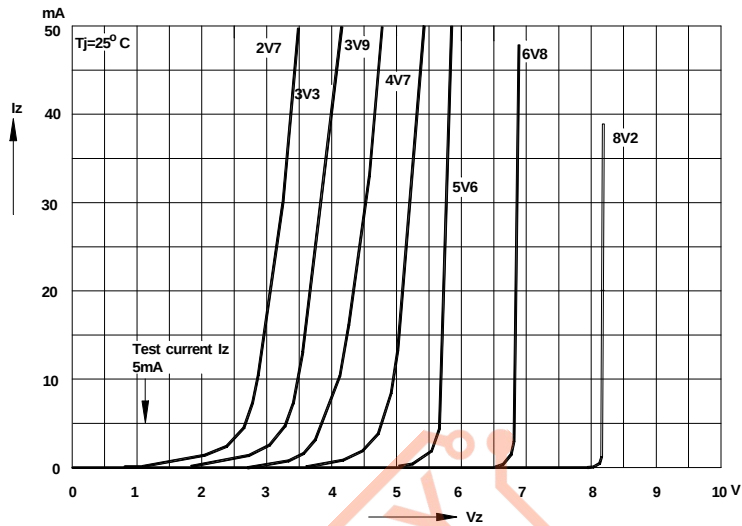
SHIKE MAKE CONSCIOUS PRODUCT

CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE



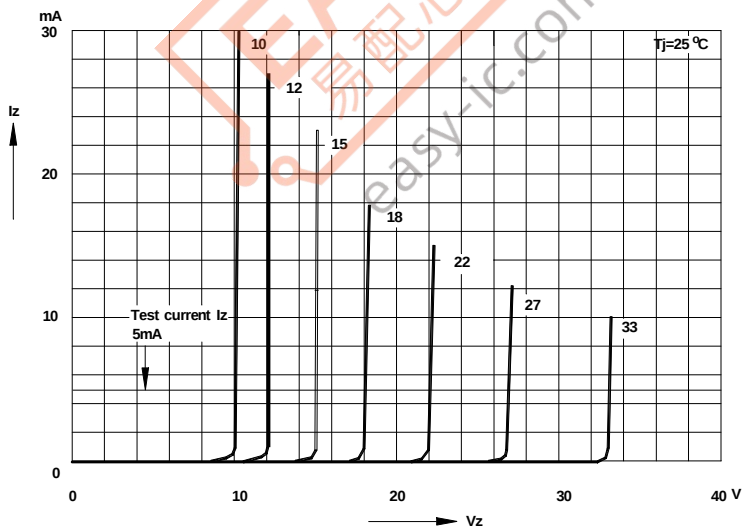
Breakdown characteristics

$T_J = \text{constant (pulsed)}$



Breakdown characteristics

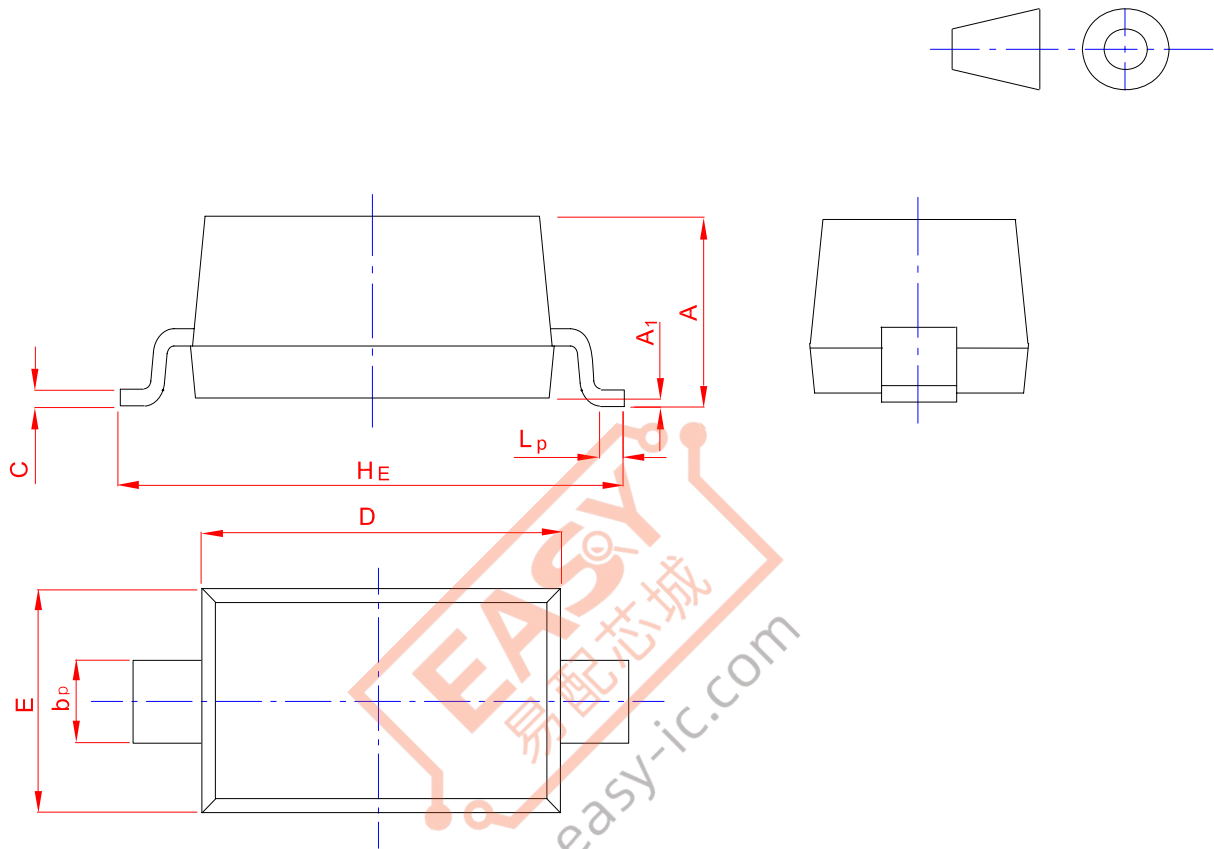
$T_J = \text{constant (pulsed)}$



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20

