

# BZT52C...W

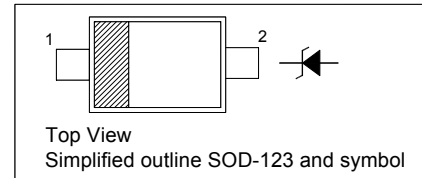
## SILICON PLANAR ZENER DIODES

### Features

- Ideally suited for automated assembly processes
- Total power dissipation: max. 500 mW

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

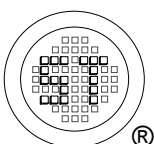


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	500	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 65 to + 150	$^\circ\text{C}$

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

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



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 71116



ISO 9001:2000  
Certificate No. 0506098

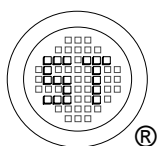
Dated : 09/11/2007

# BZT52C...W

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

Type	Marking Code	Zener Voltage Range <sup>1)</sup>			Dynamic Impedance			Reverse Leakage Current	
		$V_{znom}$ V	$I_{ZT}$ mA	for $V_{ZT}$ V	$Z_{ZT}$ $\Omega$ (Max.)	$Z_{ZK}$ $\Omega$ (Max.)	at $I_{ZK}$ mA	$I_R$ $\mu\text{A}$ (Max.)	at $V_R$ V
BZT52C2V4W	MH	2.4	5	2.2...2.6	100	600	1	50	1
BZT52C2V7W	MJ	2.7	5	2.5...2.9	100	600	1	20	1
BZT52C3V0W	MK	3.0	5	2.8...3.2	95	600	1	10	1
BZT52C3V3W	MM	3.3	5	3.1...3.5	95	600	1	5	1
BZT52C3V6W	MN	3.6	5	3.4...3.8	90	600	1	5	1
BZT52C3V9W	MP	3.9	5	3.7...4.1	90	600	1	3	1
BZT52C4V3W	MR	4.3	5	4...4.6	90	600	1	3	1
BZT52C4V7W	MX	4.7	5	4.4...5	80	500	1	3	2
BZT52C5V1W	MY	5.1	5	4.8...5.4	60	480	1	2	2
BZT52C5V6W	MZ	5.6	5	5.2...6	40	400	1	1	2
BZT52C6V2W	NA	6.2	5	5.8...6.6	10	150	1	3	4
BZT52C6V8W	NB	6.8	5	6.4...7.2	15	80	1	2	4
BZT52C7V5W	NC	7.5	5	7...7.9	15	80	1	1	5
BZT52C8V2W	ND	8.2	5	7.7...8.7	15	80	1	0.7	5
BZT52C9V1W	NE	9.1	5	8.5...9.6	15	100	1	0.5	6
BZT52C10W	NF	10	5	9.4...10.6	20	150	1	0.2	7
BZT52C11W	NH	11	5	10.4...11.6	20	150	1	0.1	8
BZT52C12W	NJ	12	5	11.4...12.7	25	150	1	0.1	8
BZT52C13W	NK	13	5	12.4...14.1	30	170	1	0.1	8
BZT52C15W	NM	15	5	13.8...15.6	30	200	1	0.1	10.5
BZT52C16W	NN	16	5	15.3...17.1	40	200	1	0.1	11.2
BZT52C18W	NP	18	5	16.8...19.1	45	225	1	0.1	12.6
BZT52C20W	NR	20	5	18.8...21.2	55	225	1	0.1	14
BZT52C22W	NX	22	5	20.8...23.3	55	250	1	0.1	15.4
BZT52C24W	NY	24	5	22.8...25.6	70	250	1	0.1	16.8
BZT52C27W	NZ	27	2	25.1...28.9	80	300	0.5	0.1	18.9
BZT52C30W	PA	30	2	28...32	80	300	0.5	0.1	21
BZT52C33W	PB	33	2	31...35	80	325	0.5	0.1	23.1
BZT52C36W	PC	36	2	34...38	90	350	0.5	0.1	25.2
BZT52C39W	PD	39	2	37...41	130	350	0.5	0.1	27.3

<sup>1)</sup>  $V_Z$  is tested with pulses (20 ms).



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

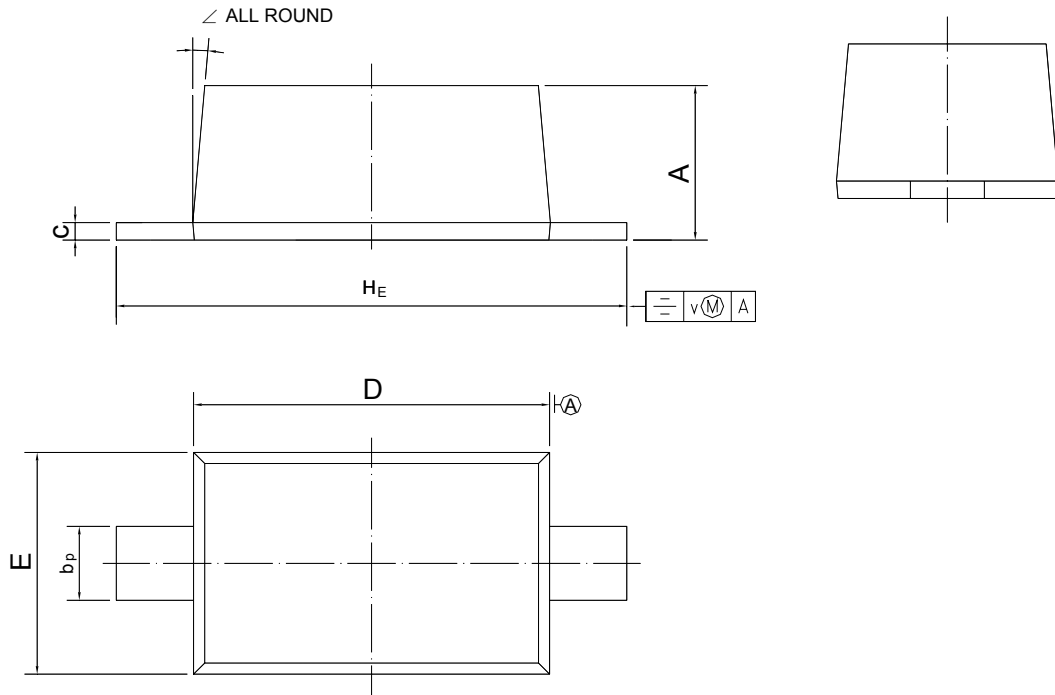
Dated : 09/11/2007

# BZT52C...W

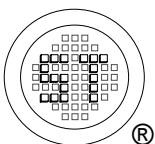
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	$b_p$	c	D	E	$H_E$	v	$\angle$
mm	1.15 1.05	0.6 0.5	0.135 0.127	2.7 2.6	1.65 1.55	3.9 3.7	0.2	5°



**SEMTECH ELECTRONICS LTD.**  
 (Subsidiary of Sino-Tech International Holdings Limited, a company  
 listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
 Certificate No. 05103



ISO 14001:2004  
 Certificate No. 71116



ISO 9001:2000  
 Certificate No. 0506098

Dated : 09/11/2007