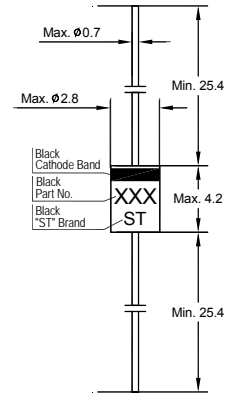


# BZX1.5C

## SILICON PLANAR ZENER DIODES



Glass Case DO-41  
Dimensions in mm

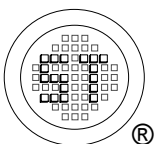
### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	1.5 <sup>1)</sup>	W
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 65 to + 175	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.2	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 : 12/06/2007

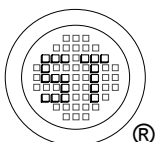
# BZX1.5C

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

Type	Zener Voltage Range <sup>1)</sup>			Maximum Dynamic Resistance			Maximum Reverse Leakage Current		Maximum DC Zener Current <sup>2)</sup> $I_{ZM}$ (mA)
	$V_{Znom}$ (V)	$V_{ZT}$ (V)	$I_{ZT}$ (mA)	( $\Omega$ ) at $I_{ZT}$	( $\Omega$ ) at $I_{ZK}$	$I_{ZK}$ (mA)	$I_R$ ( $\mu$ A)	$V_R$ (V)	
BZX1.5C3V3	3.3	3.1...3.5	113.6	10	500	1	100	1	454
BZX1.5C3V6	3.6	3.4...3.8	104.2	9	500	1	75	1	416
BZX1.5C3V9	3.9	3.7...4.1	96.1	7.5	500	1	25	1	384
BZX1.5C4V3	4.3	4...4.6	87.2	6	500	1	5	1	348
BZX1.5C4V7	4.7	4.4...5	79.8	5	500	1	5	1.5	319
BZX1.5C5V1	5.1	4.8...5.4	73.5	4	350	1	5	2	294
BZX1.5C5V6	5.6	5.2...6	66.9	2	250	1	5	3	267
BZX1.5C6V2	6.2	5.8...6.6	60.5	2	200	1	5	4	241
BZX1.5C6V8	6.8	6.4...7.2	55.1	2.5	200	1	5	5.2	220
BZX1.5C7V5	7.5	7...7.9	50	3	400	0.5	5	6.8	200
BZX1.5C8V2	8.2	7.7...8.7	45.7	3.5	400	0.5	5	6.5	182
BZX1.5C9V1	9.1	8.5...9.6	41.2	4	500	0.5	5	7	164
BZX1.5C10	10	9.4...10.6	37.5	4.5	500	0.25	5	8	150
BZX1.5C11	11	10.4...11.6	34.1	5.5	550	0.25	1	8.4	136
BZX1.5C12	12	11.4...12.7	31.2	6.5	550	0.25	1	9.1	125
BZX1.5C13	13	12.4...14.1	28.8	7	550	0.25	1	9.9	115
BZX1.5C15	15	13.8...15.6	25	9	550	0.25	1	11.4	100
BZX1.5C16	16	15.3...17.1	23.4	10	600	0.25	1	12.2	93
BZX1.5C18	18	16.8...19.1	20.8	12	600	0.25	1	13.7	83
BZX1.5C20	20	18.8...21.2	18.7	14	650	0.25	1	15.2	75
BZX1.5C22	22	20.8...23.3	17	17.5	650	0.25	1	16.7	68
BZX1.5C24	24	22.8...25.6	15.6	19	700	0.25	1	18.2	62
BZX1.5C27	27	25.1...28.9	13.9	23	700	0.25	1	20.6	55
BZX1.5C30	30	28...32	12.5	26	750	0.25	1	22.8	50
BZX1.5C33	33	31...35	11.4	33	800	0.25	1	25.1	45
BZX1.5C36	36	34...38	10.4	38	850	0.25	1	27.4	41
BZX1.5C39	39	37...41	9.6	45	900	0.25	1	29.7	38
BZX1.5C43	43	40...46	8.7	53	950	0.25	1	32.7	34
BZX1.5C47	47	44...50	8	67	1000	0.25	1	35.8	31
BZX1.5C51	51	48...54	7.3	70	1100	0.25	1	38.8	29
BZX1.5C56	56	52...60	6.7	86	1300	0.25	1	42.6	26
BZX1.5C62	62	58...66	6	100	1500	0.25	1	44.1	24
BZX1.5C68	68	64...72	5.5	120	1700	0.25	1	51.7	22
BZX1.5C75	75	70...79	5	140	2000	0.25	1	56	20
BZX1.5C82	82	77...87	4.6	160	2500	0.25	1	62.2	18
BZX1.5C91	91	85...96	4.1	200	3000	0.25	1	69.2	16
BZX1.5C100	100	94...106	3.7	250	3100	0.25	1	76	15
BZX1.5C110	110	104...116	3.4	300	4000	0.25	1	83.6	13
BZX1.5C120	120	114...127	2.1	380	4500	0.25	1	91.2	12
BZX1.5C130	130	124...141	2.9	450	5000	0.25	1	98.8	11
BZX1.5C150	150	138...156	2.5	600	6000	0.25	1	114	10
BZX1.5C160	160	153...171	2.3	700	6500	0.25	1	121.6	9
BZX1.5C180	180	168...191	2.1	900	7000	0.25	1	136.8	8
BZX1.5C200	200	188...212	1.9	1200	8000	0.25	1	152	7

<sup>1)</sup> Tested with pulse  $t_p = 20$  ms.

<sup>2)</sup> Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.



**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 : 12/06/2007