

# BZX384C Series

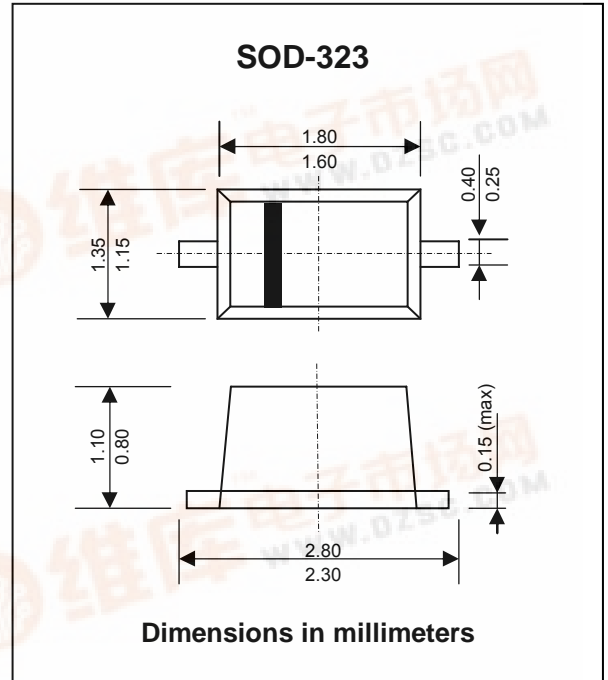
## ZENER DIODES

### FEATURES :

- \* Silicon Planar Power Zener Diodes
- \* The Zener voltages are graded according to the international E 24 standard.
- \* Standard Zener voltage tolerance is  $\pm 5\%$ . Replace "C" with "B" for  $\pm 2\%$  tolerance.
- \* Pb / RoHS Free

### MECHANICAL DATA

- \* Case : SOD-323 Plastic Package
- \* Weight : 0.004 gram



### Maximum Ratings and Thermal Characteristics (Ta 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener Current	$I_{ZM}$	250	mA
Power Dissipation at $T_{amp} = 25\text{ °C}$	$P_{tot}$	200 <sup>(1)</sup>	Mw
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	650 <sup>(2)</sup>	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_S$	-65 to + 150	°C

#### Notes:

- (1) Device on fiberglass substrate
- (2) Valid provided that electrodes are ambient temperature

## ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type	Marking	Zener Voltage rang <sup>(1)</sup> at I <sub>ZT1</sub>		Dynamic Resistance at I <sub>ZT1</sub>	Temp.Coefficient of Zener voltage at I <sub>ZT1</sub>		Test Current I <sub>ZT1</sub> (mA)	Dynamic Resistance at I <sub>ZT2</sub>	Test Current I <sub>ZT2</sub> (mA)	Reverse Leakage Current at	
		V <sub>Z</sub> (V)			α <sub>VZ</sub> (10 <sup>-4</sup> /K)					I <sub>R</sub> (μA)	V <sub>R</sub> (V)
		min	max	r <sub>zj</sub> (Ω)	min	max					
BZX384C2V4	W1	2.20	2.60	70 (≤100)	-9.0	-4.0	5	275	1.0	50.0	1.0
BZX384C2V7	W2	2.50	2.90	75 (≤100)	-9.0	-4.0	5	300 (≤600)	1.0	20.0	1.0
BZX384C3V0	W3	2.80	3.20	80 (≤95)	-9.0	-3.0	5	325 (≤600)	1.0	10.0	1.0
BZX384C3V3	W4	3.10	3.50	85 (≤95)	-8.0	-3.0	5	350 (≤600)	1.0	5.00	1.0
BZX384C3V6	W5	3.40	3.80	85 (≤90)	-8.0	-3.0	5	375 (≤600)	1.0	5.00	1.0
BZX384C3V9	W6	3.70	4.10	85 (≤90)	-7.0	-3.0	5	400 (≤600)	1.0	3.00	1.0
BZX384C4V3	W7	4.00	4.60	80 (≤90)	-6.0	-1.0	5	410 (≤600)	1.0	3.00	1.0
BZX384C4V7	W8	4.40	5.00	50 (≤80)	-5.0	2.0	5	425 (≤500)	1.0	3.00	2.0
BZX384C5V1	W9	4.80	5.40	40 (≤60)	-3.0	4.0	5	400 (≤480)	1.0	2.00	2.0
BZX384C5V6	WA	5.20	6.00	15 (≤40)	-2.0	6.0	5	80 (≤400)	1.0	1.00	2.0
BZX384C6V2	WB	5.80	6.60	6.0 (≤10)	-1.0	7.0	5	40 (≤150)	1.0	3.00	4.0
BZX384C6V8	WC	6.40	7.20	6.0 (≤15)	2.0	7.0	5	30 (≤80)	1.0	2.00	4.0
BZX384C7V5	WD	7.00	7.90	6.0 (≤15)	3.0	7.0	5	30 (≤80)	1.0	1.00	5.0
BZX384C8V2	WE	7.70	8.70	6.0 (≤15)	4.0	7.0	5	40 (≤80)	1.0	0.70	5.0
BZX384C9V1	WF	8.50	9.60	6.0 (≤15)	5.0	8.0	5	40 (≤100)	1.0	0.50	6.0
BZX384C10	WG	9.40	10.6	8.0 (≤20)	5.0	8.0	5	50 (≤150)	1.0	0.20	7.0
BZX384C11	WH	10.4	11.6	10 (≤20)	5.0	9.0	5	50 (≤150)	1.0	0.10	8.0
BZX384C12	WI	11.4	12.7	10 (≤25)	6.0	9.0	5	50 (≤150)	1.0	0.10	8.0
BZX384C13	WK	12.4	14.1	10 (≤30)	7.0	9.0	5	50 (≤170)	1.0	0.10	8.0
BZX384C15	WL	13.8	15.6	10 (≤30)	7.0	9.0	5	50 (≤200)	1.0	0.05	0.7 Vznom.
BZX384C16	WM	15.3	17.1	10 (≤40)	8.0	9.5	5	50 (≤200)	1.0	0.05	0.7 Vznom.
BZX384C18	WN	16.8	19.1	10 (≤45)	8.0	9.5	5	50 (≤225)	1.0	0.05	0.7 Vznom.
BZX384C20	WO	18.8	21.2	15 (≤55)	8.0	10.0	5	60 (≤225)	1.0	0.05	0.7 Vznom.
BZX384C22	WP	20.8	23.3	20 (≤55)	8.0	10.0	5	60 (≤250)	1.0	0.05	0.7 Vznom.
BZX384C24	WR	22.8	25.6	25 (≤70)	8.0	10.0	5	60 (≤250)	1.0	0.05	0.7 Vznom.
BZX384C27	WS	25.1	28.9	25 (≤80)	8.0	10.0	2	65 (≤300)	0.5	0.05	0.7 Vznom.
BZX384C30	WT	28.0	32.0	30 (≤80)	8.0	10.0	2	70 (≤300)	0.5	0.05	0.7 Vznom.
BZX384C33	WU	31.0	35.0	35 (≤80)	8.0	10.0	2	75 (≤325)	0.5	0.05	0.7 Vznom.
BZX384C36	WW	34.0	38.0	35 (≤90)	8.0	10.0	2	80 (≤350)	0.5	0.05	0.7 Vznom.
BZX384C39	WX	37.0	41.0	40 (≤130)	10.0	12.0	2	80 (≤350)	0.5	0.05	0.7 Vznom.
BZX384C43	WY	40.0	46.0	45 (≤150)	10.0	12.0	2	85 (≤375)	0.5	0.05	0.7 Vznom.
BZX384C47	WZ	44.0	50.0	50 (≤170)	10.0	12.0	2	85 (≤375)	0.5	0.05	0.7 Vznom.
BZX384C51	X1	48.0	54.0	60 (≤180)	10.0	12.0	2	85 (≤400)	0.5	0.05	0.7 Vznom.
BZX384C56	X2	52.0	60.0	70 (≤200)	9.0	11.0	2	100 (≤425)	0.5	0.05	0.7 Vznom.
BZX384C62	X3	58.0	66.0	80 (≤215)	9.0	12.0	2	100 (≤450)	0.5	0.05	0.7 Vznom.
BZX384C68	X4	64.0	72.0	90 (≤240)	10.0	12.0	2	150 (≤475)	0.5	0.05	0.7 Vznom.
BZX384C75	X5	70.0	79.0	95 (≤255)	10.0	12.0	2	170 (≤500)	0.5	0.05	0.7 Vznom.

**Notes :**

(1) Measured with pulses p = 5 ms