

# BZX384C Series

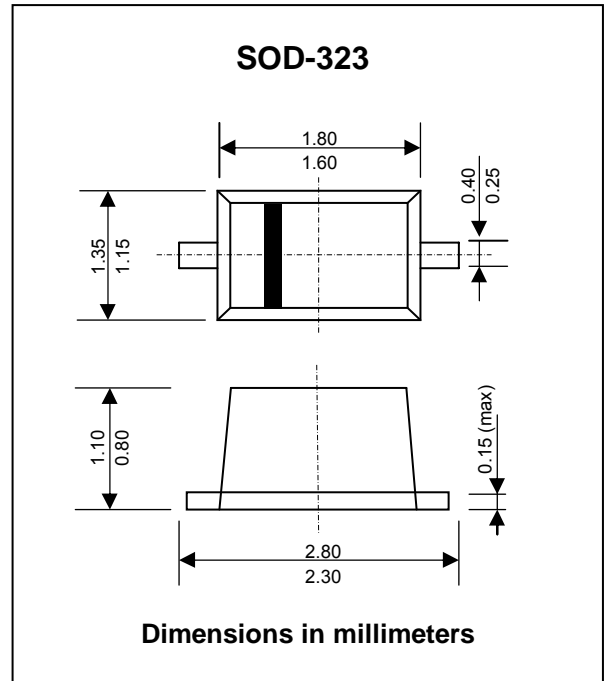
## ZENER DIODES

### 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 $T_{amp} = 25\text{ }^{\circ}\text{C}$	$P_{tot}$	200 <sup>(1)</sup>	Mw
Thermal Resistance Junction to Ambient Air	$R_{eJA}$	650 <sup>(2)</sup>	$^{\circ}\text{C/W}$
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature Range	$T_S$	-65 to + 150	$^{\circ}\text{C}$

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

Notes :

(1) Measured with pulses  $p_p = 5$  ms