

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

BZX384C Series



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 ⁽¹⁾	Mw
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	650 ⁽²⁾	°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	Zener Voltage		Dynamic	Temp.Coefficient of		Test	Dynamic	Test	Reverse Leakage	
	rang ⁽¹⁾ at I _{ZT1}		Resistance	Zener voltage at I _{ZT1}			Resistance		Current	
	V _Z (V)		at I _{ZT1}	α _{VZ} (10 ⁻⁴ /K)			at I _{ZT2}		at	
	min	max	r _{zj} (Ω)	min	max	I _{ZT1} (mA)	r _{zj} (Ω)	I _{ZT2} (mA)	I _R (μA)	V _R (V)
BZX384C2V4	2.20	2.60	70 (≤100)	-9.0	-4.0	5	275	1.0	50.0	1.0
BZX384C2V7	2.50	2.90	75 (≤100)	-9.0	-4.0	5	300 (≤600)	1.0	20.0	1.0
BZX384C3V0	2.80	3.20	80 (≤95)	-9.0	-3.0	5	325 (≤600)	1.0	10.0	1.0
BZX384C3V3	3.10	3.50	85 (≤95)	-8.0	-3.0	5	350 (≤600)	1.0	5.00	1.0
BZX384C3V6	3.40	3.80	85 (≤90)	-8.0	-3.0	5	375 (≤600)	1.0	5.00	1.0
BZX384C3V9	3.70	4.10	85 (≤90)	-7.0	-3.0	5	400 (≤600)	1.0	3.00	1.0
BZX384C4V3	4.00	4.60	80 (≤90)	-6.0	-1.0	5	410 (≤600)	1.0	3.00	1.0
BZX384C4V7	4.40	5.00	50 (≤80)	-5.0	2.0	5	425 (≤500)	1.0	3.00	2.0
BZX384C5V1	4.80	5.40	40 (≤60)	-3.0	4.0	5	400 (≤480)	1.0	2.00	2.0
BZX384C5V6	5.20	6.00	15 (≤40)	-2.0	6.0	5	80 (≤400)	1.0	1.00	2.0
BZX384C6V2	5.80	6.60	6.0 (≤10)	-1.0	7.0	5	40 (≤150)	1.0	3.00	4.0
BZX384C6V8	6.40	7.20	6.0 (≤15)	2.0	7.0	5	30 (≤80)	1.0	2.00	4.0
BZX384C7V5	7.00	7.90	6.0 (≤15)	3.0	7.0	5	30 (≤80)	1.0	1.00	5.0
BZX384C8V2	7.70	8.70	6.0 (≤15)	4.0	7.0	5	40 (≤80)	1.0	0.70	5.0
BZX384C9V1	8.50	9.60	6.0 (≤15)	5.0	8.0	5	40 (≤100)	1.0	0.50	6.0
BZX384C10	9.40	10.6	8.0 (≤20)	5.0	8.0	5	50 (≤150)	1.0	0.20	7.0
BZX384C11	10.4	11.6	10 (≤20)	5.0	9.0	5	50 (≤150)	1.0	0.10	8.0
BZX384C12	11.4	12.7	10 (≤25)	6.0	9.0	5	50 (≤150)	1.0	0.10	8.0
BZX384C13	12.4	14.1	10 (≤30)	7.0	9.0	5	50 (≤170)	1.0	0.10	8.0
BZX384C15	13.8	15.6	10 (≤30)	7.0	9.0	5	50 (≤200)	1.0	0.05	0.7 Vznom.
BZX384C16	15.3	17.1	10 (≤40)	8.0	9.5	5	50 (≤200)	1.0	0.05	0.7 Vznom.
BZX384C18	16.8	19.1	10 (≤45)	8.0	9.5	5	50 (≤225)	1.0	0.05	0.7 Vznom.
BZX384C20	18.8	21.2	15 (≤55)	8.0	10.0	5	60 (≤225)	1.0	0.05	0.7 Vznom.
BZX384C22	20.8	23.3	20 (≤55)	8.0	10.0	5	60 (≤250)	1.0	0.05	0.7 Vznom.
BZX384C24	22.8	25.6	25 (≤70)	8.0	10.0	5	60 (≤250)	1.0	0.05	0.7 Vznom.
BZX384C27	25.1	28.9	25 (≤80)	8.0	10.0	2	65 (≤300)	0.5	0.05	0.7 Vznom.
BZX384C30	28.0	32.0	30 (≤80)	8.0	10.0	2	70 (≤300)	0.5	0.05	0.7 Vznom.
BZX384C33	31.0	35.0	35 (≤80)	8.0	10.0	2	75 (≤325)	0.5	0.05	0.7 Vznom.
BZX384C36	34.0	38.0	35 (≤90)	8.0	10.0	2	80 (≤350)	0.5	0.05	0.7 Vznom.
BZX384C39	37.0	41.0	40 (≤130)	10.0	12.0	2	80 (≤350)	0.5	0.05	0.7 Vznom.
BZX384C43	40.0	46.0	45 (≤150)	10.0	12.0	2	85 (≤375)	0.5	0.05	0.7 Vznom.
BZX384C47	44.0	50.0	50 (≤170)	10.0	12.0	2	85 (≤375)	0.5	0.05	0.7 Vznom.
BZX384C51	48.0	54.0	60 (≤180)	10.0	12.0	2	85 (≤400)	0.5	0.05	0.7 Vznom.
BZX384C56	52.0	60.0	70 (≤200)	9.0	11.0	2	100 (≤425)	0.5	0.05	0.7 Vznom.
BZX384C62	58.0	66.0	80 (≤215)	9.0	12.0	2	100 (≤450)	0.5	0.05	0.7 Vznom.
BZX384C68	64.0	72.0	90 (≤240)	10.0	12.0	2	150 (≤475)	0.5	0.05	0.7 Vznom.
BZX384C75	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