

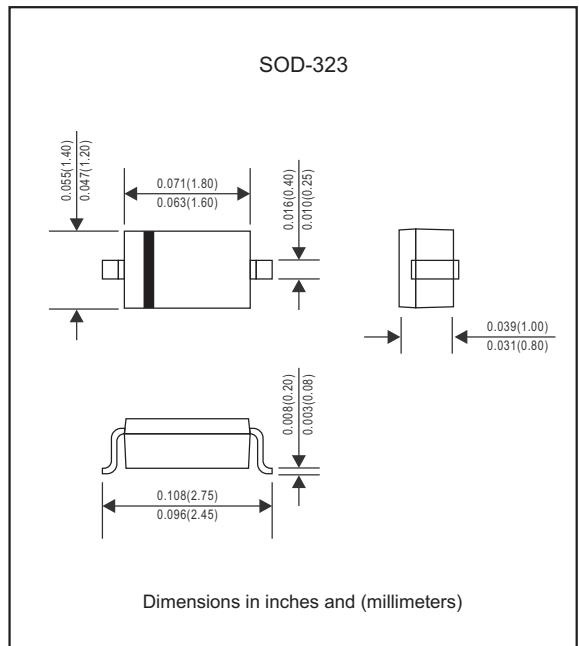
Features

- Silicon epitaxial planar chip structure.
- Wide zener reverse voltage range 2.0V to 75V.
- Small package size for high density applications.
- Ideally suited for automated assembly processes.
- Pb-free package is available
- We declare that the material of product compliance with RoHS requirements.
- Compliant to Halogen-free

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-323
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

Package outline



Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	300	mW
Forward Voltage at $I_F = 10$ mA	V_F	0.9	V
Typical thermal resistance junction to ambient ⁽¹⁾	$R_{\theta JA}$	417	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

(1) Thermal resistance from junction to ambient at P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper areas pads.

Characteristics at Ta = 25°C

Type	Marking	Zener Voltage Range ⁽¹⁾			I _{ZT} (mA)	Dynamic Impedance Z _{ZT} (at I _{ZT}) Max (Ω)	Reverse Current	
		V _{ZT} (at I _{ZT})					I _R Max (μA)	at V _R (V)
		Min (V)	Nom (V)	Max (V)				
BZX384B2V0	0B	1.96	2.0	2.04	5	100	120	0.5
BZX384B2V2	0C	2.16	2.2	2.24	5	100	120	0.7
BZX384B2V4	C1	2.35	2.4	2.45	5	100	120	1
BZX384B2V7	D1	2.65	2.7	2.75	5	110	120	1
BZX384B3V0	E1	2.94	3.0	3.06	5	120	50	1
BZX384B3V3	F1	3.23	3.3	3.37	5	130	20	1
BZX384B3V6	H1	3.53	3.6	3.67	5	130	10	1
BZX384B3V9	J1	3.82	3.9	3.98	5	130	5	1
BZX384B4V3	K1	4.21	4.3	4.39	5	130	5	1
BZX384B4V7	M1	4.61	4.7	4.79	5	130	2	1
BZX384B5V1	N1	5	5.1	5.2	5	130	2	1.5
BZX384B5V6	P1	5.49	5.6	5.71	5	80	1	2.5
BZX384B6V2	R1	6.08	6.2	6.32	5	50	1	3
BZX384B6V8	X1	6.66	6.8	6.94	5	30	0.5	3.5
BZX384B7V5	Y1	7.35	7.5	7.65	5	30	0.5	4
BZX384B8V2	Z1	8.04	8.2	8.36	5	30	0.5	5
BZX384B9V1	A2	8.92	9.1	9.28	5	30	0.5	6
BZX384B10	B2	9.8	10	10.2	5	30	0.1	7
BZX384B11	C2	10.78	11	11.22	5	30	0.1	8
BZX384B12	D2	11.76	12	12.24	5	35	0.1	9
BZX384B13	E2	12.74	13	13.26	5	35	0.1	10
BZX384B15	F2	14.7	15	15.3	5	40	0.1	11
BZX384B16	H2	15.68	16	16.32	5	40	0.1	12
BZX384B18	J2	17.64	18	18.36	5	45	0.1	13
BZX384B20	K2	19.6	20	20.4	5	50	0.1	15
BZX384B22	M2	21.56	22	22.44	5	55	0.1	17
BZX384B24	N2	23.52	24	24.48	5	60	0.1	19
BZX384B27	P2	26.46	27	27.54	2	70	0.1	21
BZX384B30	R2	29.4	30	30.60	2	80	0.1	23
BZX384B33	X2	32.34	33	33.66	2	80	0.1	25
BZX384B36	Y2	35.28	36	36.72	2	90	0.1	27
BZX384B39	Z2	38.22	39	39.78	2	100	0.1	30
BZX384B43	A3	42.14	43	43.86	2	130	0.1	33
BZX384B47	B3	46.06	47	47.94	2	150	0.1	36
BZX384B51	C3	49.98	51	52.02	2	180	0.1	39
BZX384B56	D3	54.88	56	57.12	2	200	0.1	43
BZX384B62	E3	60.76	62	63.24	2	215	0.1	47
BZX384B68	F3	66.64	68	69.36	2	240	0.1	52
BZX384B75	H3	73.5	75	76.5	2	265	0.1	56

(1) V_{ZT} is tested with pulses (20 ms)

Rating and characteristic curves

Fig.1 Maximum Continuous Power Derating

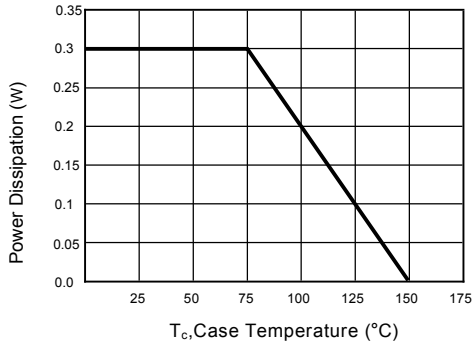
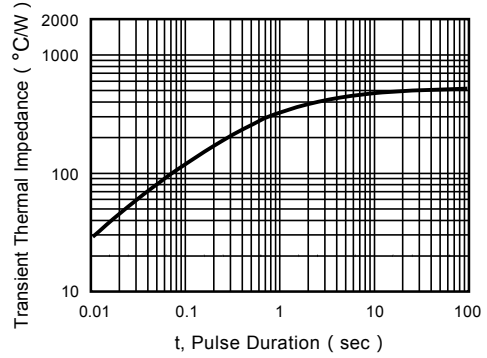


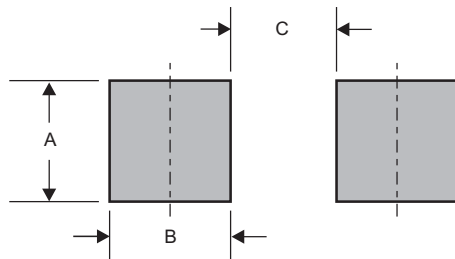
Fig.2 Typical Transient Thermal Impedance



Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-323	0.033 (0.83)	0.025 (0.63)	0.063 (1.60)