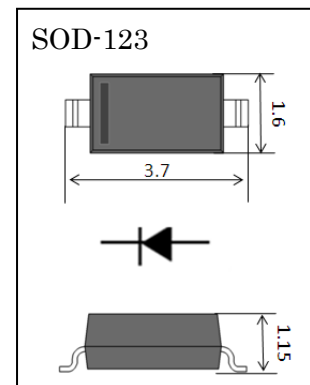


Zener Diodes / DATA SHEET

BZT52B2V4–BZT52B75 Series

- ◇ Constant Voltage control
 - ◇ Wide Voltage Range Selection 2.4V to 75V
 - ◇ RoHS compliant / Green EMC
 - ◇ Matte Tin (Sn) Lead finish
 - ◇ Cathode Band / Device marking
- Refer to table list



Absolute Maximum Ratings (T_a = 25 °C)

Symbol	Parameter	Value	Units
P _D	Power Dissipation	350	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 to +125	°C
I _{ZM}	Maximum Regulator Current	P _D /V _Z	mA

Electrical Characteristics (T_a = 25 °C)

Type Number	Device Marking	V _Z (V) *1			I _{ZT} mA	Z _{ZT} @I _{ZT} Ω	Z _{ZK} @I _{ZK} Ω	I _{ZK} (mA)	I _R (μA)	V _R (V)
		Nom(V)	Min(V)	Max(V)						
BZT52B2V4	2WX	2.4	2.35	2.45	5	100	600	1.0	50	1.0
BZT52B2V7	2W1	2.7	2.65	2.75	5	100	600	1.0	20	1.0
BZT52B3V0	2W2	3.0	2.94	3.06	5	95	600	1.0	10	1.0
BZT52B3V3	2W3	3.3	3.23	3.37	5	95	600	1.0	5	1.0
BZT52B3V6	2W4	3.6	3.53	3.67	5	90	600	1.0	5	1.0
BZT52B3V9	2W5	3.9	3.82	3.98	5	90	600	1.0	3	1.0
BZT52B4V3	2W6	4.3	4.21	4.39	5	90	600	1.0	3	1.0
BZT52B4V7	2W7	4.7	4.61	4.79	5	80	500	1.0	3	2.0
BZT52B5V1	2W8	5.1	5.00	5.20	5	60	480	1.0	2	2.0
BZT52B5V6	2W9	5.6	5.49	5.71	5	40	400	1.0	1	2.0
BZT52B6V2	2WA	6.2	6.08	6.32	5	10	150	1.0	3	4.0

Continued next page

Electrical Characteristics (Ta = 25 °C)

Type Number	Device Marking	Vz (V) *1			I _{ZT} mA	Z _{ZT} @I _{ZT} Ω	Z _{ZK} @I _{ZK} Ω	I _{ZK} (mA)	I _R (μA)	V _R (V)
		Nom(V)	Min(V)	Max(V)						
BZT52B6V8	2WB	6.8	6.66	6.94	5	15	80	1.0	2	4.0
BZT52B7V5	2WC	7.5	7.35	7.65	5	15	80	1.0	1	5.0
BZT52B8V2	2WD	8.2	8.04	8.36	5	15	80	1.0	0.7	5.0
BZT52B9V1	2WE	9.1	8.92	9.28	5	15	100	1.0	0.5	6.0
BZT52B10	2WF	10	9.80	10.20	5	20	150	1.0	0.2	7.0
BZT52B11	2WG	11	10.78	11.22	5	20	150	1.0	0.1	8.0
BZT52B12	2WH	12	11.76	12.24	5	25	150	1.0	0.1	8.0
BZT52B13	2WI	13	12.74	13.26	5	30	170	1.0	0.1	8.0
BZT52B14	2WX/2WY	14	13.72	14.28	5	25	110	1.0	0.1	10.5
BZT52B15	2WJ	15	14.70	15.30	5	30	200	1.0	0.1	10.5
BZT52B16	2WK	16	15.68	16.32	5	40	200	1.0	0.1	11.2
BZT52B18	2WL	18	17.64	18.36	5	45	225	1.0	0.1	12.6
BZT52B20	2WM	20	19.60	20.40	5	55	225	1.0	0.1	14.0
BZT52B22	2WN	22	21.56	22.44	5	55	250	1.0	0.1	15.4
BZT52B24	2WO	24	23.52	24.48	5	70	250	1.0	0.1	16.8
BZT52B27	2WP	27	26.46	27.54	2	80	300	0.5	0.1	18.9
BZT52B30	2WQ	30	29.40	30.60	2	80	300	0.5	0.1	21.0
BZT52B33	2WR	33	32.34	33.66	2	80	325	0.5	0.1	23.1
BZT52B36	2WS	36	35.28	36.72	2	90	350	0.5	0.1	25.2
BZT52B39	2WT	39	38.22	39.78	2	130	350	0.5	0.1	27.3
BZT52B43	2WU	43	42.14	43.86	2	130	350	0.5	0.1	29.4
BZT52B47	2WV	47	45.83	48.17	2	170	1000	0.25	0.1	36
BZT52B51	2X1	51	49.73	52.27	2	180	1300	0.25	0.1	39
BZT52B56	2X2	56	54.60	57.40	2	200	1400	0.25	0.1	43
BZT52B62	2X3	62	60.45	63.55	2	225	1400	0.25	0.1	47
BZT52B68	2X4	68	66.30	69.70	2	240	1600	0.25	0.1	52
BZT52B75	2X5	75	73.13	76.87	2	265	1700	0.25	0.1	56

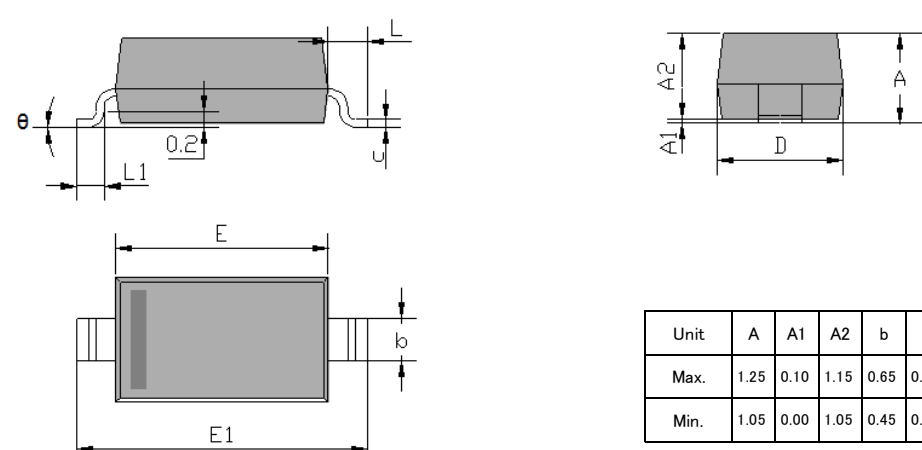
*1 Pulse width = 10 ms

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BZT Series	SOD123	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

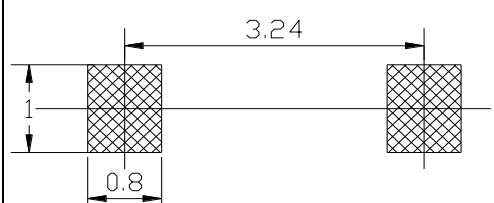
Package Dimensions

Package outline : SOD-123



Unit	A	A1	A2	b	c	D	E	E1	L	L1	θ
Max.	1.25	0.10	1.15	0.65	0.15	1.70	2.80	3.85	0.500 REF.	0.45	8°
Min.	1.05	0.00	1.05	0.45	0.08	1.50	2.60	3.55		0.25	0°

SOD123 Package Outline



Land Pattern Recommendation

Note:

1. Halogen free, EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Lead frame: A42
5. Other Tolerance: ± 0.05
6. Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
7. Unit: mm