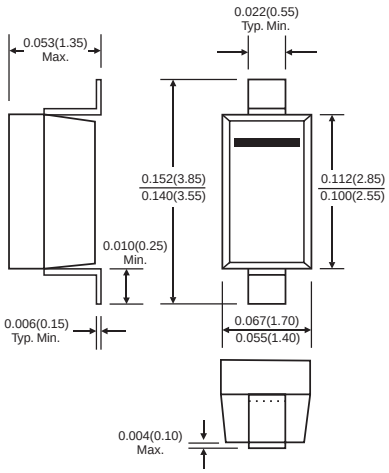
BZT52B2V4-BZT52B51

Surface Mount Zener Diode

RoHS COMPLIANT



SOD-123



Dimensions in inches and (millimeters)

Features

- ✧ Planar die construction.
- ✧ “B” for ±2% tolerance.
- ✧ General purpose, medium current.
- ✧ Ideally suited for automated assembly processes.

Applications

- ✧ Zener diode.
- ✧ Ultra-small surface mount package.

Ordering Information

Type No.	Marking	Package Code
BZT52B2V4-BZT52B51	See table 2	SOD-123

Package Information

Device	Package	Shipping
BZT52B2V4-BZT52B51	SOD-123	3000/Tape&Reel

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Value**	**Unit**
Forward Voltage @ I_F=10mA	V_F	0.9	V
Power Dissipation	P_d	500	mW
Thermal resistance,junction to ambient air	$R_{\theta jA}$	305	℃/W
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-65-150	℃

Notes: 1. Device mounted on ceramic PCB; 7.6mm x 9.4mm x 0.87mm with pad areas 25mm^2

2. Short duration test pulse used to minimize self-heating effect.
3. When provided, otherwise, parts are provided with date code only, and type number identifications appears on reel only.
4. f = 1KHz

BZT52B2V4-BZT52B51

Surface Mount Zener Diode

RoHS COMPLIANT

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Type Number	Marking Code	Zener Voltage Range				Maximum Zener Impedance		
		V_Z@I_{ZT}			I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}	I_{ZK}
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA
BZT52B2V4	2WX	2.4	2.35	2.45	5	85	600	1.0
BZT52B2V7	2W1	2.7	2.65	2.75	5	83	500	1.0
BZT52B3V0	2W2	3.0	2.94	3.06	5	95	500	1.0
BZT52B3V3	2W3	3.3	3.23	3.37	5	95	500	1.0
BZT52B3V6	2W4	3.6	3.53	3.67	5	95	500	1.0
BZT52B3V9	2W5	3.9	3.82	3.98	5	95	500	1.0
BZT52B4V3	2W6	4.3	4.21	4.39	5	95	500	1.0
BZT52B4V7	2W7	4.7	4.61	4.79	5	78	500	1.0
BZT52B5V1	2W8	5.1	5	5.2	5	60	480	1.0
BZT52B5V6	2W9	5.6	5.49	5.71	5	40	400	1.0
BZT52B6V2	2WA	6.2	6.08	6.32	5	10	200	1.0
BZT52B6V8	2WB	6.8	6.66	6.94	5	8	150	1.0
BZT52B7V5	2WC	7.5	7.35	7.65	5	7	50	1.0
BZT52B8V2	2WD	8.2	8.04	8.36	5	7	50	1.0
BZT52B9V1	2WE	9.1	8.92	9.28	5	10	50	1.0
BZT52B10	2WF	10	9.8	10.2	5	15	70	1.0
BZT52B11	2WG	11	10.8	11.2	5	20	70	1.0
BZT52B12	2WH	12	11.8	12.2	5	20	90	1.0
BZT52B13	2WI	13	12.7	13.3	5	25	110	1.0
BZT52B15	2WJ	15	14.7	15.3	5	30	110	1.0
BZT52B16	2WK	16	15.7	16.3	5	40	170	1.0
BZT52B18	2WL	18	17.6	18.4	5	50	170	1.0
BZT52B20	2WM	20	19.6	20.4	5	50	220	1.0
BZT52B22	2WN	22	21.6	22.4	5	55	220	1.0
BZT52B24	2WO	24	23.5	24.5	5	80	220	1.0
BZT52B27	2WP	27	26.5	27.5	5	80	250	1.0
BZT52B30	2WQ	30	29.4	30.6	5	80	250	1.0
BZT52B33	2WR	33	32.3	33.7	5	80	250	1.0
BZT52B36	2WS	36	35.3	36.7	5	90	250	1.0
BZT52B39	2WT	39	38.2	39.8	5	90	300	1.0
BZT52B43	2WU	43	42.1	43.9	5	100	700	1.0
BZT52B47	2WV	47	46.1	47.9	5	100	750	1.0
BZT52B51	2WW	51	50	52	5	100	750	1.0

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

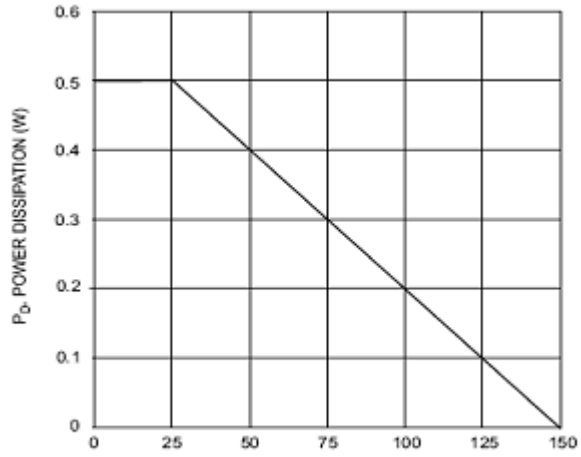


Fig. 1 Power Dissipation vs Ambient Temperature

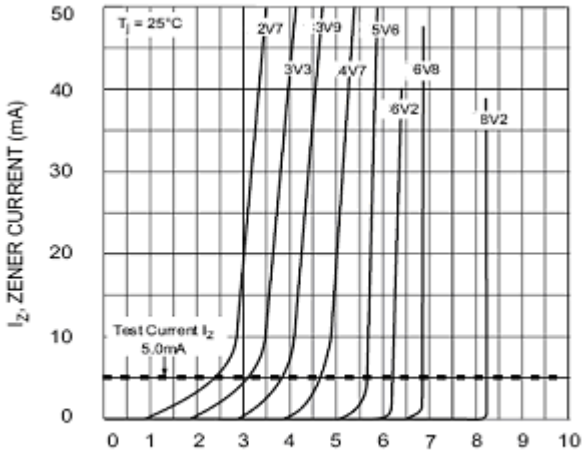


Fig. 2 Zener Breakdown Characteristics

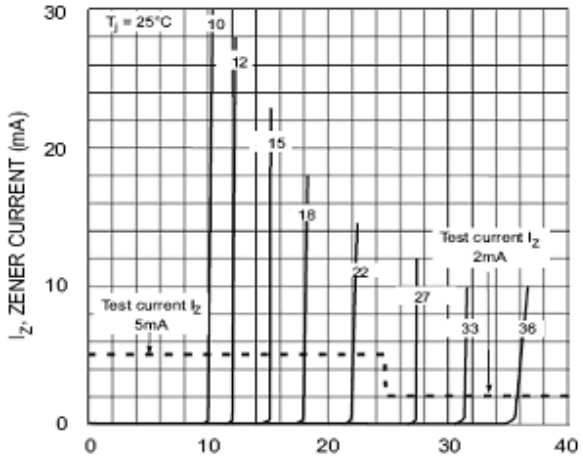


Fig. 3 Zener Breakdown Characteristics

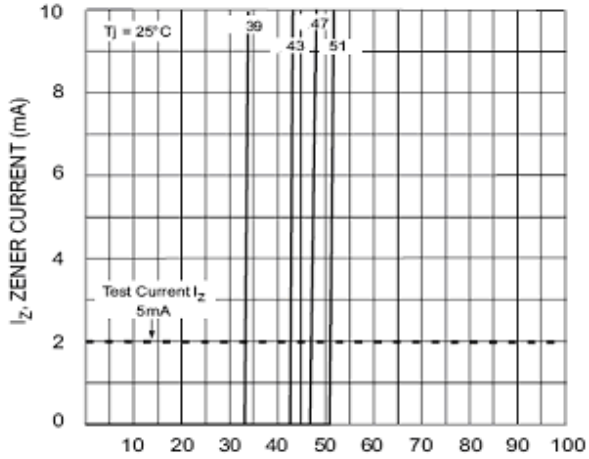


Fig. 4 Zener Breakdown Characteristics

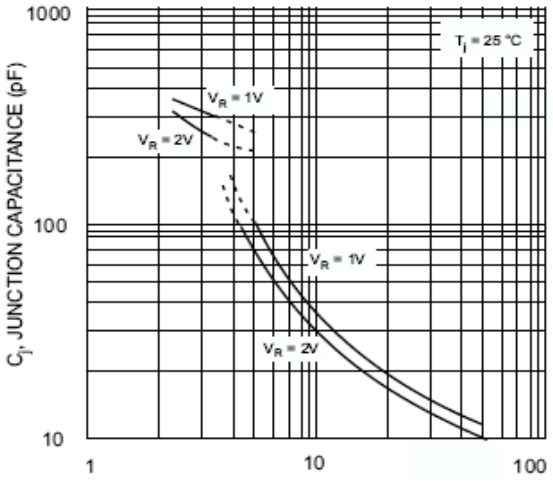


Fig. 5 Junction Capacitance vs Nominal Zener Voltage

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123	3000/REEL	90000	40X20X22	5.00	4.00