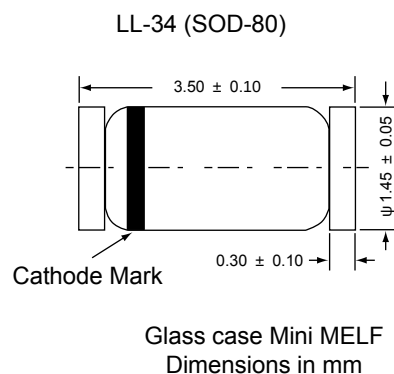


BZT52C Series

SILICON PLANAR ZENER DIODES

Features

- Ideally Suited for Automated Assembly Processes
- Total power dissipation: max. 500 mW



Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_s	- 65 to + 150	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	305	$^{\circ}\text{C}/\text{mW}$
Forward Voltage at $I_F = 10\text{ mA}$	V_F	0.9	V

BZT52C Series

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Type	Zener Voltage Range ¹⁾			Dynamic Impedance			Reverse Leakage Current	
	V_{znom} V	I_{ZT} mA	for V_{ZT} V	Z_{ZT} at I_{ZT} Ω (Max.)	Z_{ZK} Ω (Max.)	at I_{ZK} mA	I_R μA (Max.)	at V_R V
BZT52C2V4	2.4	5	2.2...2.6	100	600	1	50	1
BZT52C2V7	2.7	5	2.5...2.9	100	600	1	20	1
BZT52C3V0	3.0	5	2.8...3.2	95	600	1	10	1
BZT52C3V3	3.3	5	3.1...3.5	95	600	1	5	1
BZT52C3V6	3.6	5	3.4...3.8	90	600	1	5	1
BZT52C3V9	3.9	5	3.7...4.1	90	600	1	3	1
BZT52C4V3	4.3	5	4...4.6	90	600	1	3	1
BZT52C4V7	4.7	5	4.4...5	80	500	1	3	2
BZT52C5V1	5.1	5	4.8...5.4	60	480	1	2	2
BZT52C5V6	5.6	5	5.2...6	40	400	1	1	2
BZT52C6V2	6.2	5	5.8...6.6	10	150	1	3	4
BZT52C6V8	6.8	5	6.4...7.2	15	80	1	2	4
BZT52C7V5	7.5	5	7...7.9	15	80	1	1	5
BZT52C8V2	8.2	5	7.7...8.7	15	80	1	0.7	5
BZT52C9V1	9.1	5	8.5...9.6	15	100	1	0.5	6
BZT52C10	10	5	9.4...10.6	20	150	1	0.2	7
BZT52C11	11	5	10.4...11.6	20	150	1	0.1	8
BZT52C12	12	5	11.4...12.7	25	150	1	0.1	8
BZT52C13	13	5	12.4...14.1	30	170	1	0.1	8
BZT52C15	15	5	13.8...15.6	30	200	1	0.1	10.5
BZT52C16	16	5	15.3...17.1	40	200	1	0.1	11.2
BZT52C18	18	5	16.8...19.1	45	225	1	0.1	12.6
BZT52C20	20	5	18.8...21.2	55	225	1	0.1	14
BZT52C22	22	5	20.8...23.3	55	250	1	0.1	15.4
BZT52C24	24	5	22.8...25.6	70	250	1	0.1	16.8
BZT52C27	27	2	25.1...28.9	80	300	0.5	0.1	18.9
BZT52C30	30	2	28...32	80	300	0.5	0.1	21
BZT52C33	33	2	31...35	80	325	0.5	0.1	23.1
BZT52C36	36	2	34...38	90	350	0.5	0.1	25.2
BZT52C39	39	2	37...41	130	350	0.5	0.1	27.3

¹⁾ V_Z is tested with pulses (20 ms).