

SOD-323 Plastic-Encapsulate Diodes

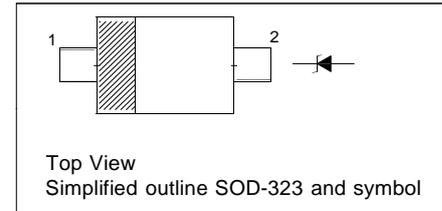
ZENER DIODE

FEATURES

- Planar die construction
- 200mW power dissipation on ceramic PBC
- General purpose, medium current
- Ideally suited for automated assembly processes
- Available in lead free version

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Maximum Ratings (T_a=25°C unless otherwise specified)

| Characteristic | Symbol | Value | Unit |
|--|------------------|----------|------|
| Forward Voltage (Note 2) @ I _F = 10mA | V _F | 0.9 | V |
| Power Dissipation(Note 1) | P _D | 200 | mW |
| Thermal Resistance (Junction to Ambient | R _{θJA} | 625 | °C/W |
| Operating Temperature | T _{op} | 150 | °C |
| Storage Temperature Range | T _{stg} | -15~+150 | °C |



Characteristics at Ta = 25°C

| Type | Marking Code | Zener Voltage Range ¹⁾ | | | Dynamic Impedance | | | | Reverse Leakage Current | |
|------------|--------------|-----------------------------------|-----------------|--------------------|-------------------|--------------------|-----------------|--------------------|-------------------------|-------------------|
| | | V _{znom} | V _{ZT} | at I _{ZT} | Z _{ZT} | at I _{ZT} | Z _{ZK} | at I _{ZK} | I _R | at V _R |
| | | V | V | mA | Max. (Ω) | mA | Max. (Ω) | mA | Max. (μA) | V |
| BZT52C2V4S | MH | 2.4 | 2.2...2.6 | 5 | 100 | 5 | 600 | 1 | 50 | 1 |
| BZT52C2V7S | MJ | 2.7 | 2.5...2.9 | 5 | 100 | 5 | 600 | 1 | 20 | 1 |
| BZT52C3V0S | MK | 3.0 | 2.8...3.2 | 5 | 95 | 5 | 600 | 1 | 10 | 1 |
| BZT52C3V3S | MM | 3.3 | 3.1...3.5 | 5 | 95 | 5 | 600 | 1 | 5 | 1 |
| BZT52C3V6S | MN | 3.6 | 3.4...3.8 | 5 | 90 | 5 | 600 | 1 | 5 | 1 |
| BZT52C3V9S | MP | 3.9 | 3.7...4.1 | 5 | 90 | 5 | 600 | 1 | 3 | 1 |
| BZT52C4V3S | MR | 4.3 | 4...4.6 | 5 | 90 | 5 | 600 | 1 | 3 | 1 |
| BZT52C4V7S | MX | 4.7 | 4.4...5 | 5 | 80 | 5 | 500 | 1 | 3 | 2 |
| BZT52C5V1S | MY | 5.1 | 4.8...5.4 | 5 | 60 | 5 | 480 | 1 | 2 | 2 |
| BZT52C5V6S | MZ | 5.6 | 5.2...6 | 5 | 40 | 5 | 400 | 1 | 1 | 2 |
| BZT52C6V2S | NA | 6.2 | 5.8...6.6 | 5 | 10 | 5 | 150 | 1 | 3 | 4 |
| BZT52C6V8S | NB | 6.8 | 6.4...7.2 | 5 | 15 | 5 | 80 | 1 | 2 | 4 |
| BZT52C7V5S | NC | 7.5 | 7...7.9 | 5 | 15 | 5 | 80 | 1 | 1 | 5 |
| BZT52C8V2S | ND | 8.2 | 7.7...8.7 | 5 | 15 | 5 | 80 | 1 | 0.7 | 5 |
| BZT52C9V1S | NE | 9.1 | 8.5...9.6 | 5 | 15 | 5 | 100 | 1 | 0.5 | 6 |
| BZT52C10S | NF | 10 | 9.4...10.6 | 5 | 20 | 5 | 150 | 1 | 0.2 | 7 |
| BZT52C11S | NH | 11 | 10.4...11.6 | 5 | 20 | 5 | 150 | 1 | 0.1 | 8 |
| BZT52C12S | NJ | 12 | 11.4...12.7 | 5 | 25 | 5 | 150 | 1 | 0.1 | 8 |
| BZT52C13S | NK | 13 | 12.4...14.1 | 5 | 30 | 5 | 170 | 1 | 0.1 | 8 |
| BZT52C14S | NL | 14 | 13.3...14.7 | 5 | 30 | 5 | 180 | 1 | 0.1 | 10 |
| BZT52C15S | NM | 15 | 13.8...15.6 | 5 | 30 | 5 | 200 | 1 | 0.1 | 10.5 |
| BZT52C16S | NN | 16 | 15.3...17.1 | 5 | 40 | 5 | 200 | 1 | 0.1 | 11.2 |
| BZT52C18S | NP | 18 | 16.8...19.1 | 5 | 45 | 5 | 225 | 1 | 0.1 | 12.6 |
| BZT52C20S | NR | 20 | 18.8...21.2 | 5 | 55 | 5 | 225 | 1 | 0.1 | 14 |
| BZT52C22S | NX | 22 | 20.8...23.3 | 5 | 55 | 5 | 250 | 1 | 0.1 | 15.4 |
| BZT52C24S | NY | 24 | 22.8...25.6 | 5 | 70 | 5 | 250 | 1 | 0.1 | 16.8 |
| BZT52C27S | NZ | 27 | 25.1...28.9 | 2 | 80 | 2 | 300 | 0.5 | 0.1 | 18.9 |
| BZT52C30S | PA | 30 | 28...32 | 2 | 80 | 2 | 300 | 0.5 | 0.1 | 21 |
| BZT52C33S | PB | 33 | 31...35 | 2 | 80 | 2 | 325 | 0.5 | 0.1 | 23.1 |
| BZT52C36S | PC | 36 | 34...38 | 2 | 90 | 2 | 350 | 0.5 | 0.1 | 25.2 |
| BZT52C39S | PD | 39 | 37...41 | 2 | 130 | 2 | 350 | 0.5 | 0.1 | 27.3 |
| BZT52C43S | 6A | 43 | 40...46 | 2.5 | 130 | 2 | 500 | 1 | 2 | 33 |
| BZT52C47S | 6B | 47 | 44...50 | 2.5 | 150 | 2 | 500 | 1 | 2 | 36 |
| BZT52C51S | 6C | 51 | 48...54 | 2.5 | 180 | 2 | 500 | 1 | 1 | 39 |
| BZT52C56S | 6D | 56 | 52...60 | 2.5 | 180 | 2 | 500 | 1 | 1 | 43 |
| BZT52C62S | 6E | 62 | 58...66 | 2.5 | 200 | 2 | 500 | 1 | 0.2 | 47 |
| BZT52C68S | 6F | 68 | 64...72 | 2.5 | 250 | 2 | 500 | 1 | 0.2 | 52 |
| BZT52C75S | 6H | 75 | 70...79 | 2.5 | 300 | 2 | 500 | 1 | 0.2 | 57 |

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

