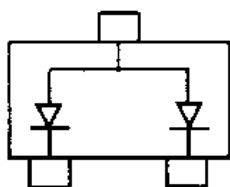


## ZENER DIODE

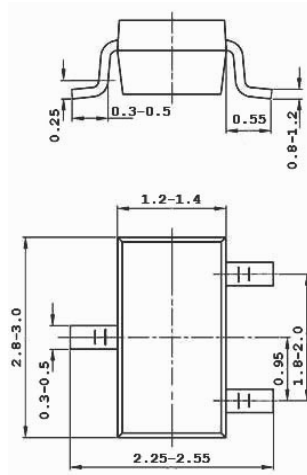
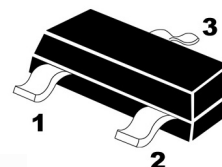
### FEATURES

- Dual zeners in common anode configuration
- 350mW Power Dissipation Rating
- Ideally Suited for Automated Insertion
- $\Delta v_z$  for both diodes in one case is  $\leq 5\%$
- Common cathode style available see DZ series
- Also available in lead free version



**MARKING:** see table on the next page

### SOT-23



Unit:mm

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

#### MAXIMUM RATINGS

| Parameters                                  | Symbols         | Value    | UNITS |
|---------------------------------------------|-----------------|----------|-------|
| Power Dissipation                           | $P_d$           | 300      | mW    |
| Thermal Resistance, Junction to Ambient Air | $R_{\theta JA}$ | 417      | °C/W  |
| Operating and Storage Temperature Range     | $T_j, T_{STG}$  | -65~+150 | °C    |

# **ELECTRICAL CHARACTERISTICS** Ratings at 25°C ambient temperature unless otherwise specified

| Type Number | Type Code | Zener Voltage Range <sup>1</sup> | Maximum Zener Impedance <sup>2</sup>      |                                           | Typical Temperature Coefficient | Minimum Reverse Voltage <sup>1</sup> |
|-------------|-----------|----------------------------------|-------------------------------------------|-------------------------------------------|---------------------------------|--------------------------------------|
|             |           | @ I <sub>ZT</sub> = 5.0mA        | Z <sub>ZT</sub> @ I <sub>ZT</sub> = 5.0mA | Z <sub>ZK</sub> @ I <sub>ZK</sub> = 5.0mA |                                 | @ I <sub>R</sub> = 0.1μA             |
|             |           | V <sub>Z</sub> (volts)           | Ω                                         |                                           | T <sub>c</sub> (%/°C)           | V <sub>R</sub> (volts)               |
| AZ23C2V7    | KD1       | 2.5-2.9                          | 83                                        | 500                                       | -0.065                          | --                                   |
| AZ23C3V0    | KD2       | 2.8-3.2                          | 95                                        | 500                                       | -0.060                          | --                                   |
| AZ23C3V3    | KD3       | 3.1-3.5                          | 95                                        | 500                                       | -0.055                          | --                                   |
| AZ23C3V6    | KD4       | 3.4-3.8                          | 95                                        | 500                                       | -0.055                          | --                                   |
| AZ23C3V9    | KD5       | 3.7-4.1                          | 95                                        | 500                                       | -0.050                          | --                                   |
| AZ23C4V3    | KD6       | 4.0-4.6                          | 95                                        | 500                                       | -0.035                          | --                                   |
| AZ23C4V7    | KD7       | 4.4-5.0                          | 78                                        | 500                                       | -0.015                          | --                                   |
| AZ23C5V1    | KD8       | 4.8-5.4                          | 60                                        | 480                                       | +0.005                          | 0.8                                  |
| AZ23C5V6    | KD9       | 5.2-6.0                          | 40                                        | 400                                       | +0.020                          | 1.0                                  |
| AZ23C6V2    | KDA       | 5.8-6.6                          | 10                                        | 200                                       | +0.030                          | 2.0                                  |
| AZ23C6V8    | KDB       | 6.4-7.2                          | 8.0                                       | 150                                       | +0.045                          | 3.0                                  |
| AZ23C7V5    | KDC       | 7.0-7.9                          | 7.0                                       | 50                                        | +0.050                          | 5.0                                  |
| AZ23C8V2    | KDD       | 7.7-8.7                          | 7.0                                       | 50                                        | +0.055                          | 6.0                                  |
| AZ23C9V1    | KDE       | 8.5-9.6                          | 10                                        | 50                                        | +0.065                          | 7.0                                  |
| AZ23C10     | KDF       | 9.4-10.6                         | 15                                        | 70                                        | +0.065                          | 7.5                                  |
| AZ23C11     | KDG       | 10.4-11.6                        | 20                                        | 70                                        | +0.070                          | 8.5                                  |
| AZ23C12     | KDH       | 11.4-12.7                        | 20                                        | 90                                        | +0.075                          | 9.0                                  |
| AZ23C13     | KDI       | 12.4-14.1                        | 25                                        | 110                                       | +0.080                          | 10.0                                 |
| AZ23C15     | KDJ       | 13.8-15.6                        | 30                                        | 110                                       | +0.080                          | 11.0                                 |
| AZ23C16     | KDK       | 15.8-17.1                        | 40                                        | 170                                       | +0.090                          | 12.0                                 |
| AZ23C18     | KDL       | 16.8-19.1                        | 50                                        | 170                                       | +0.090                          | 14.0                                 |
| AZ23C20     | KDM       | 18.8-21.2                        | 50                                        | 220                                       | +0.090                          | 15.0                                 |
| AZ23C22     | KDN       | 20.8-23.3                        | 55                                        | 220                                       | +0.090                          | 17.0                                 |
| AZ23C24     | KDO       | 22.8-25.6                        | 80                                        | 220                                       | +0.090                          | 18.0                                 |
| AZ23C27     | KDP       | 25.1-28.9                        | 80                                        | 250                                       | +0.090                          | 20.0                                 |
| AZ23C30     | KDQ       | 28-32                            | 80                                        | 250                                       | +0.090                          | 22.5                                 |
| AZ23C33     | KDR       | 31-35                            | 80                                        | 250                                       | +0.090                          | 25.0                                 |
| AZ23C36     | KDS       | 34-38                            | 90                                        | 250                                       | +0.090                          | 27.0                                 |
| AZ23C39     | KDT       | 37-41                            | 90                                        | 300                                       | +0.110                          | 29.0                                 |

Notes: 1. Short duration test pulse used to minimize self-heating effect.

2. f = 1KHz