

2EZ2.7D10 ~ 2EZ200D10

SILICON ZENER DIODES

V_Z : 2.7 - 200 Volts

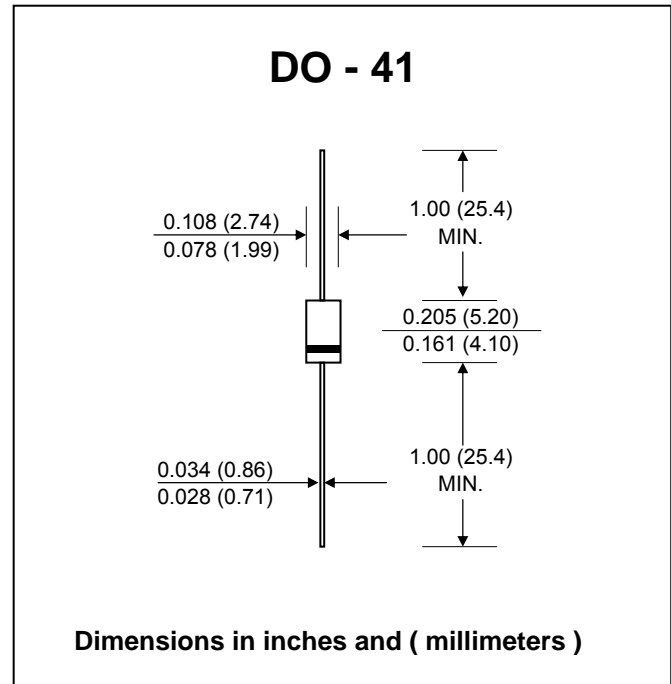
P_D : 2 Watts

FEATURES :

- * Complete Voltage Range 2.7 to 200 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * ± 10% tolerance
- * **RoHS / REACH Free**

MECHANICAL DATA

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.339 gram



MAXIMUM RATINGS

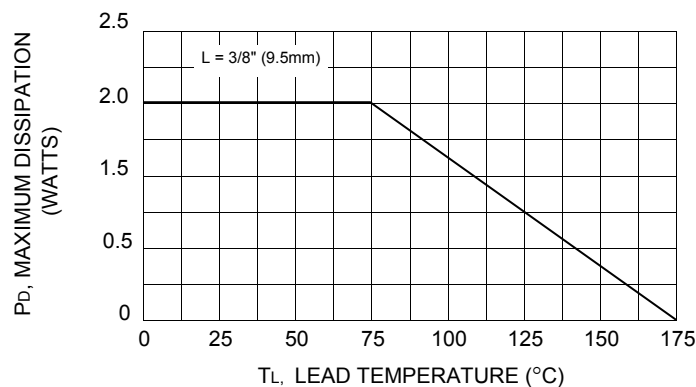
Rating at 25 °C ambient temperature unless otherwise specified

| Rating | Symbol | Value | Unit |
|--|------------------|---------------|------|
| DC Power Dissipation at T _L = 75 °C (Note1) | P _D | 2.0 | W |
| Maximum Forward Voltage at I _F = 200 mA | V _F | 1.2 | V |
| Junction Temperature Range | T _J | - 55 to + 175 | °C |
| Storage Temperature Range | T _{STG} | - 55 to + 175 | °C |

Note :

(1) T_L = Lead temperature at 3/8 " (9.5mm) from body

Fig. 1 POWER TEMPERATURE DERATING CURVE



ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

| Type No. | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current |
|-----------|-----------------------|----------|-------------------------|-------------------|----------|---------------------------------|----------|--------------------------|
| | $V_Z @ I_{ZT}$ | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | I_{ZK} | $I_R @ V_R$ | I_{ZM} | |
| | (V) | (mA) | (Ω) | (Ω) | (mA) | (μ A) | (V) | (mA) |
| 2EZ2.7D10 | 2.7 | 80 | 10 | 400 | 1.0 | 100 | 1.0 | 660 |
| 2EZ3.0D10 | 3.0 | 160 | 8.0 | 400 | 1.0 | 100 | 1.0 | 600 |
| 2EZ3.3D10 | 3.3 | 145 | 8.0 | 400 | 1.0 | 80 | 1.0 | 545 |
| 2EZ3.6D10 | 3.6 | 139 | 5.0 | 400 | 1.0 | 80 | 1.0 | 504 |
| 2EZ3.9D10 | 3.9 | 128 | 5.0 | 400 | 1.0 | 50 | 1.0 | 468 |
| 2EZ4.3D10 | 4.3 | 116 | 4.5 | 400 | 1.0 | 50 | 1.0 | 434 |
| 2EZ4.7D10 | 4.7 | 106 | 4.5 | 550 | 1.0 | 50 | 1.0 | 386 |
| 2EZ5.1D10 | 5.1 | 98.0 | 3.5 | 600 | 1.0 | 50 | 1.0 | 356 |
| 2EZ5.6D10 | 5.6 | 89.5 | 2.5 | 500 | 1.0 | 50 | 2.0 | 324 |
| 2EZ6.2D10 | 6.2 | 80.5 | 1.5 | 700 | 1.0 | 50 | 3.0 | 292 |
| 2EZ6.5D10 | 6.5 | 77.0 | 1.7 | 700 | 1.0 | 50 | 3.5 | 278 |
| 2EZ6.8D10 | 6.8 | 73.5 | 2.0 | 700 | 1.0 | 50 | 4.0 | 266 |
| 2EZ7.5D10 | 7.5 | 66.5 | 2.0 | 700 | 0.5 | 50 | 5.0 | 242 |
| 2EZ8.2D10 | 8.2 | 61.0 | 2.3 | 700 | 0.5 | 50 | 6.0 | 220 |
| 2EZ9.1D10 | 9.1 | 55.0 | 2.5 | 700 | 0.5 | 50 | 7.0 | 200 |
| 2EZ10D10 | 10 | 50.0 | 3.5 | 700 | 0.25 | 50 | 7.6 | 182 |
| 2EZ11D10 | 11 | 45.5 | 4.0 | 700 | 0.25 | 50 | 8.4 | 166 |
| 2EZ12D10 | 12 | 41.5 | 4.5 | 700 | 0.25 | 1.0 | 9.1 | 152 |
| 2EZ13D10 | 13 | 38.5 | 5.0 | 700 | 0.25 | 0.5 | 9.9 | 138 |
| 2EZ14D10 | 14 | 35.7 | 5.5 | 700 | 0.25 | 0.5 | 10.6 | 130 |
| 2EZ15D10 | 15 | 33.4 | 7.0 | 700 | 0.25 | 0.5 | 11.4 | 122 |
| 2EZ16D10 | 16 | 31.2 | 8.0 | 700 | 0.25 | 0.5 | 12.2 | 114 |
| 2EZ17D10 | 17 | 29.4 | 9.0 | 750 | 0.25 | 0.5 | 13.0 | 107 |
| 2EZ18D10 | 18 | 27.8 | 10 | 750 | 0.25 | 0.5 | 13.7 | 100 |
| 2EZ19D10 | 19 | 26.3 | 11 | 750 | 0.25 | 0.5 | 14.4 | 95 |
| 2EZ20D10 | 20 | 25.0 | 11 | 750 | 0.25 | 0.5 | 15.2 | 90 |
| 2EZ22D10 | 22 | 22.8 | 12 | 750 | 0.25 | 0.5 | 16.7 | 82 |
| 2EZ24D10 | 24 | 20.8 | 13 | 750 | 0.25 | 0.5 | 18.2 | 76 |
| 2EZ27D10 | 27 | 18.5 | 18 | 750 | 0.25 | 0.5 | 20.6 | 68 |
| 2EZ30D10 | 30 | 16.6 | 20 | 1000 | 0.25 | 0.5 | 22.5 | 60 |
| 2EZ33D10 | 33 | 15.1 | 23 | 1000 | 0.25 | 0.5 | 25.1 | 55 |
| 2EZ36D10 | 36 | 13.9 | 25 | 1000 | 0.25 | 0.5 | 27.4 | 50 |
| 2EZ39D10 | 39 | 12.8 | 30 | 1000 | 0.25 | 0.5 | 29.7 | 47 |
| 2EZ43D10 | 43 | 11.6 | 35 | 1500 | 0.25 | 0.5 | 32.7 | 43 |
| 2EZ47D10 | 47 | 10.6 | 40 | 1500 | 0.25 | 0.5 | 35.8 | 39 |
| 2EZ51D10 | 51 | 9.8 | 48 | 1500 | 0.25 | 0.5 | 38.8 | 36 |
| 2EZ56D10 | 56 | 9.0 | 55 | 2000 | 0.25 | 0.5 | 42.6 | 32 |

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

| Type No. | Nominal Zener Voltage | | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current |
|-----------|-----------------------|----------|-------------------------|-------------------|----------|---------------------------------|----------|--------------------------|
| | $V_Z @ I_{ZT}$ | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | I_{ZK} | $I_R @ V_R$ | I_{ZM} | |
| | (V) | (mA) | (Ω) | (Ω) | (mA) | (μ A) | (V) | (mA) |
| 2EZ62D10 | 62 | 8.1 | 60 | 2000 | 0.25 | 0.5 | 47.1 | 29 |
| 2EZ68D10 | 68 | 7.4 | 75 | 2000 | 0.25 | 0.5 | 51.7 | 27 |
| 2EZ75D10 | 75 | 6.7 | 90 | 2000 | 0.25 | 0.5 | 56.0 | 24 |
| 2EZ82D10 | 82 | 6.1 | 100 | 3000 | 0.25 | 0.5 | 62.2 | 22 |
| 2EZ91D10 | 91 | 5.5 | 125 | 3000 | 0.25 | 0.5 | 69.2 | 20 |
| 2EZ100D10 | 100 | 5.0 | 175 | 3000 | 0.25 | 0.5 | 76.0 | 18 |
| 2EZ110D10 | 110 | 4.5 | 250 | 4000 | 0.25 | 0.5 | 83.6 | 17 |
| 2EZ120D10 | 120 | 4.2 | 325 | 4500 | 0.25 | 0.5 | 91.2 | 15 |
| 2EZ130D10 | 130 | 3.8 | 400 | 5000 | 0.25 | 0.5 | 98.8 | 14 |
| 2EZ140D10 | 140 | 3.6 | 500 | 5500 | 0.25 | 0.5 | 106.4 | 13 |
| 2EZ150D10 | 150 | 3.3 | 575 | 6000 | 0.25 | 0.5 | 114.0 | 12 |
| 2EZ160D10 | 160 | 3.1 | 650 | 6500 | 0.25 | 0.5 | 121.6 | 11 |
| 2EZ170D10 | 170 | 2.9 | 675 | 7000 | 0.25 | 0.5 | 130.4 | 11 |
| 2EZ180D10 | 180 | 2.8 | 725 | 7000 | 0.25 | 0.5 | 136.8 | 10 |
| 2EZ190D10 | 190 | 2.6 | 825 | 8000 | 0.25 | 0.5 | 144.8 | 10 |
| 2EZ200D10 | 200 | 2.5 | 1900 | 9990 | 0.25 | 0.5 | 152.0 | 9.0 |

Notes :

- (1) Suffix " 10 " indicates $\pm 10\%$ tolerance, suffix " 5 " indicates $\pm 5\%$ tolerance.
- (2) " EZ " will be omitted in marking on the diode