

Z043 - Z0200

V_z : 43 - 200 Volts

P_D : 0.5 Watt

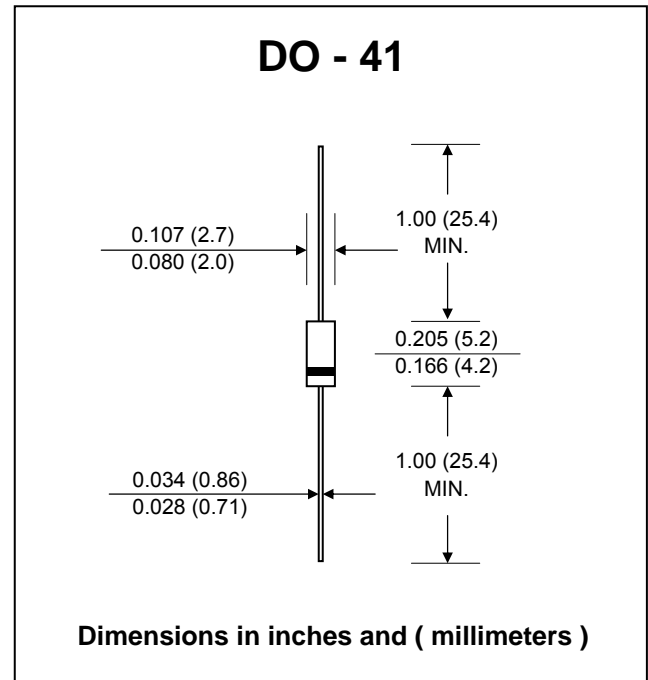
FEATURES :

- * Complete voltage range 43 to 200 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * Pb / RoHS 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

SILICON ZENER DIODES



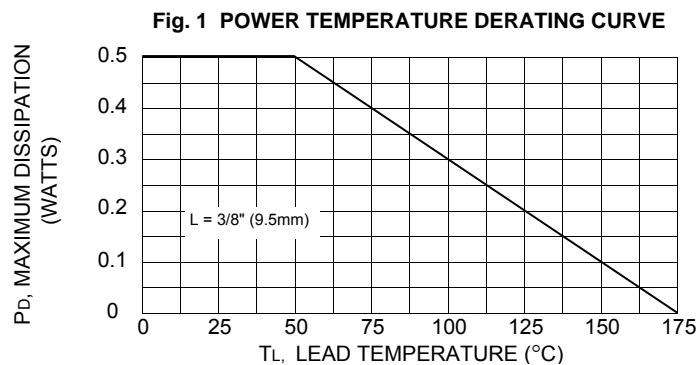
MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

| Rating | Symbol | Value | Unit |
|--|------------------|---------------|-------|
| DC Power Dissipation at T _L = 50 °C (Note1) | P _D | 0.5 | Watt |
| Maximum Forward Voltage at I _F = 200 mA | V _F | 1.2 | Volts |
| Maximum Thermal Resistance Junction to Ambient Air (Note2) | R _{θJA} | 170 | K / W |
| Junction Temperature Range | T _J | - 55 to + 175 | °C |
| Storage Temperature Range | T _{STG} | - 55 to + 175 | °C |

Notes :

- (1) T_L = Lead temperature at 3/8 " (9.5mm) from body
- (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.



ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified

| Type No. | Nominal Zener Voltage | Test Current | Maximum Zener Impedance | | | Maximum Reverse Leakage Current | | Maximum DC Zener Current | Maximum Surge Current |
|--------------|-----------------------|--------------|-------------------------|-------------------|----------|---------------------------------|-----|--------------------------|-----------------------|
| | $V_Z @ I_{ZT}$ | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | I_{ZK} | $I_R @ V_R$ | | I_{ZM} | $I_{RM}^{(2)}$ |
| | (V) | (mA) | (Ω) | (Ω) | (mA) | (μ A) | (V) | (mA) | (mApk) |
| Z043 | 43 | 2.75 | 70 | 1500 | 0.25 | 5.0 | 32 | 11.0 | 52 |
| Z047 | 47 | 2.40 | 80 | 1500 | 0.25 | 5.0 | 35 | 9.6 | 47 |
| Z051 | 51 | 2.23 | 95 | 1500 | 0.25 | 5.0 | 38 | 8.9 | 44 |
| Z056 | 56 | 2.00 | 110 | 2000 | 0.25 | 5.0 | 42 | 8.0 | 40 |
| Z062 | 62 | 1.83 | 125 | 2000 | 0.25 | 5.0 | 47 | 7.3 | 36 |
| Z068 | 68 | 1.65 | 150 | 2000 | 0.25 | 5.0 | 52 | 6.6 | 33 |
| Z075 | 75 | 1.50 | 175 | 2000 | 0.25 | 5.0 | 57 | 6.0 | 30 |
| Z082 | 82 | 1.37 | 200 | 3000 | 0.25 | 5.0 | 62 | 5.5 | 27 |
| Z091 | 91 | 1.25 | 250 | 3000 | 0.25 | 5.0 | 73 | 5.0 | 24 |
| Z0100 | 100 | 1.12 | 350 | 3000 | 0.25 | 5.0 | 76 | 4.5 | 22 |
| Z0110 | 110 | 1.00 | 450 | 4000 | 0.25 | 5.0 | 83 | 4.1 | 20 |
| Z0120 | 120 | 0.95 | 550 | 4500 | 0.25 | 5.0 | 91 | 3.8 | 18 |
| Z0130 | 130 | 0.88 | 700 | 5000 | 0.25 | 5.0 | 98 | 3.5 | 17 |
| Z0150 | 150 | 0.75 | 1000 | 6000 | 0.25 | 5.0 | 114 | 3.0 | 15 |
| Z0160 | 160 | 0.70 | 1100 | 6500 | 0.25 | 5.0 | 121 | 2.8 | 14 |
| Z0180 | 180 | 0.62 | 1400 | 7000 | 0.25 | 5.0 | 136 | 2.5 | 12.5 |
| Z0190 | 190 | 0.57 | 1400 | 7500 | 0.25 | 5.0 | 144 | 2.3 | 11.8 |
| Z0200 | 200 | 0.55 | 1900 | 9990 | 0.25 | 5.0 | 152 | 2.2 | 11.2 |

Note :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 10\%$.
 Add suffix "A" for $\pm 5\%$ tolerance, Add suffix "B" for $\pm 2\%$ tolerance.