

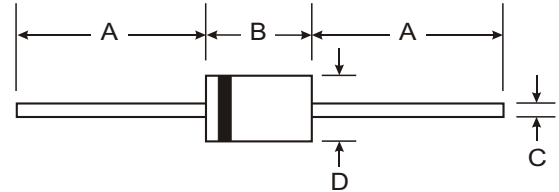
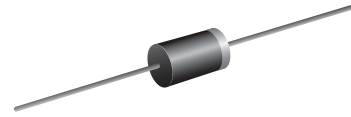
VOLTAGE RANGE: 3.3 - 200V
POWER: 1.5Watts

Features

- Silicon power zener diodes
- Complete Voltage Range 3.3 to 200 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



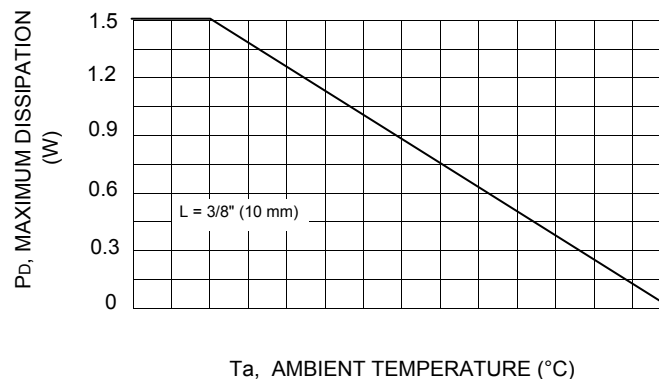
| DO-41 | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 25.40 | — |
| B | 4.06 | 5.21 |
| C | 0.71 | 0.864 |
| D | 2.00 | 2.72 |
| All Dimensions in mm | | |

Maximum Ratings T_A = 25°C unless otherwise specified

| Rating | Symbol | Value | Unit |
|----------------------------------------------------|------------------|---------------|------|
| Power Dissipation at T _a = 25 °C | P _D | 1.5 | W |
| Maximum Forward Voltage at I _F = 200 mA | V _F | 1.0 | V |
| Thermal Resistance, Junction to Lead (Note 1) | R _{θJA} | 42 | °C/W |
| Operating Temperature | T _J | - 65 to + 175 | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 175 | °C |

Note : (1) At 3/8"(10 mm) lead length form body

Fig. 1 POWER TEMPERATURE DERATING CURVE





ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

| TYPE NO. | Nominal Zener Voltage | Test Current | Maximum Dynamic Impedance | Maximum Zener Impedance | | Maximum Reverse Current | | Maximum Continuous Current | Maximum Surge Current |
|----------|-----------------------|------------------|-----------------------------------|-----------------------------------|------------------|---------------------------|--------------|----------------------------|-----------------------|
| | $V_Z @ I_{ZT}$ (V) | I_{ZT} (mA) | $Z_{ZT} @ I_{ZT}$ (Ω) | $Z_{ZK} @ I_{ZK}$ (Ω) | I_{ZK} (mA) | $I_R @ V_R$ (μ A) | V_R (V) | I_{ZM} (mA) | I_{ZSM} (A) |
| 1N6485 | 3.3 | 76.0 | 10 | 400 | 1.0 | 50 | 1.0 | 433 | 4.2 |
| 1N6486 | 3.6 | 69.0 | 10 | 400 | 1.0 | 50 | 1.0 | 397 | 3.9 |
| 1N6487 | 3.9 | 64.0 | 9 | 400 | 1.0 | 35 | 1.0 | 366 | 3.6 |
| 1N6488 | 4.3 | 58.0 | 9 | 400 | 1.0 | 5.0 | 1.0 | 332 | 3.3 |
| 1N6489 | 4.7 | 53.0 | 8 | 500 | 1.0 | 4.0 | 1.0 | 304 | 3.0 |
| 1N6490 | 5.1 | 49.0 | 7 | 500 | 1.0 | 1.0 | 1.0 | 280 | 2.7 |
| 1N6491 | 5.6 | 45.0 | 5 | 600 | 1.0 | 0.5 | 2.0 | 255 | 2.5 |
| 1N4460 | 6.2 | 40.0 | 4.0 | 200 | 1.0 | 10 | 3.72 | 230 | 2.3 |
| 1N4461 | 6.8 | 37.0 | 2.5 | 200 | 1.0 | 5.0 | 4.08 | 210 | 2.1 |
| 1N4462 | 7.5 | 34.0 | 2.5 | 400 | 0.5 | 1.0 | 4.50 | 191 | 1.9 |
| 1N4463 | 8.2 | 31.0 | 3.0 | 400 | 0.5 | 0.5 | 4.92 | 174 | 1.7 |
| 1N4464 | 9.1 | 28.0 | 4.0 | 500 | 0.5 | 0.3 | 5.46 | 157 | 1.6 |
| 1N4465 | 10 | 25.0 | 5.0 | 500 | 0.25 | 0.3 | 8.00 | 143 | 1.4 |
| 1N4466 | 11 | 23.0 | 6.0 | 550 | 0.25 | 0.3 | 8.80 | 130 | 1.3 |
| 1N4467 | 12 | 21.0 | 7.0 | 550 | 0.25 | 0.2 | 9.60 | 119 | 1.2 |
| 1N4468 | 13 | 19.0 | 8.0 | 550 | 0.25 | 0.05 | 10.4 | 110 | 1.1 |
| 1N4469 | 15 | 17.0 | 9.0 | 600 | 0.25 | 0.05 | 12.0 | 95 | 0.95 |
| 1N4470 | 16 | 15.5 | 10 | 600 | 0.25 | 0.05 | 12.8 | 90 | 0.90 |
| 1N4471 | 18 | 14.0 | 11 | 650 | 0.25 | 0.05 | 14.4 | 79 | 0.79 |
| 1N4472 | 20 | 12.5 | 12 | 650 | 0.25 | 0.05 | 16.0 | 71 | 0.71 |
| 1N4473 | 22 | 11.5 | 14 | 650 | 0.25 | 0.05 | 17.6 | 65 | 0.65 |
| 1N4474 | 24 | 10.5 | 16 | 700 | 0.25 | 0.05 | 19.2 | 60 | 0.60 |
| 1N4475 | 27 | 9.5 | 18 | 700 | 0.25 | 0.05 | 21.6 | 53 | 0.53 |
| 1N4476 | 30 | 8.5 | 20 | 750 | 0.25 | 0.05 | 24.0 | 48 | 0.48 |
| 1N4477 | 33 | 7.5 | 25 | 800 | 0.25 | 0.05 | 26.4 | 43 | 0.43 |
| 1N4478 | 36 | 7.0 | 27 | 850 | 0.25 | 0.05 | 28.8 | 40 | 0.40 |
| 1N4479 | 39 | 6.5 | 80 | 900 | 0.25 | 0.05 | 31.2 | 37 | 0.37 |
| 1N4480 | 43 | 6.0 | 40 | 950 | 0.25 | 0.05 | 34.4 | 33 | 0.33 |
| 1N4481 | 47 | 5.5 | 50 | 1000 | 0.25 | 0.05 | 37.6 | 30 | 0.30 |
| 1N4482 | 51 | 5.0 | 60 | 1100 | 0.25 | 0.05 | 40.8 | 28 | 0.28 |
| 1N4483 | 56 | 4.5 | 70 | 1300 | 0.25 | 0.25 | 44.8 | 26 | 0.26 |
| 1N4484 | 62 | 4.0 | 80 | 1500 | 0.25 | 0.25 | 49.6 | 23 | 0.23 |
| 1N4485 | 68 | 3.7 | 100 | 1700 | 0.25 | 0.25 | 54.4 | 21 | 0.21 |
| 1N4486 | 75 | 3.3 | 130 | 2000 | 0.25 | 0.25 | 60.4 | 19 | 0.19 |
| 1N4487 | 82 | 3.0 | 160 | 2500 | 0.25 | 0.25 | 65.6 | 17 | 0.17 |
| 1N4488 | 91 | 2.8 | 200 | 3000 | 0.25 | 0.25 | 72.8 | 16 | 0.16 |
| 1N4489 | 100 | 2.5 | 250 | 3100 | 0.25 | 0.25 | 80.0 | 14 | 0.14 |
| 1N4490 | 110 | 2.0 | 300 | 4000 | 0.25 | 0.25 | 88.0 | 13 | 0.13 |
| 1N4491 | 120 | 2.0 | 400 | 4500 | 0.25 | 0.25 | 96.0 | 12 | 0.12 |
| 1N4492 | 130 | 1.9 | 500 | 5000 | 0.25 | 0.25 | 104.0 | 11 | 0.11 |
| 1N4493 | 150 | 1.7 | 700 | 6000 | 0.25 | 0.25 | 120.0 | 9.5 | 0.095 |
| 1N4494 | 160 | 1.6 | 1000 | 6500 | 0.25 | 0.25 | 128.0 | 8.9 | 0.089 |
| 1N4495 | 180 | 1.4 | 1300 | 7000 | 0.25 | 0.25 | 144.0 | 7.9 | 0.079 |
| 1N4496 | 200 | 1.2 | 1500 | 8000 | 0.25 | 0.25 | 160.0 | 7.2 | 0.072 |

Note : (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.