

Zener diode

Features

1. High reliability
2. Very sharp reverse characteristic
3. Low reverse current level
4. V_Z -tolerance $\pm 5\%$



Applications

Voltage stabilization

Absolute Maximum Ratings

$T_j=25^\circ\text{C}$

| Parameter | Test Conditions | Type | Symbol | Value | Unit |
|---------------------------|------------------------------------|------|------------------|-----------|------|
| Power dissipation | $T_{\text{amb}}= 50^\circ\text{C}$ | | P_V | 1 | W |
| Z-current | | | I_Z | P_V/V_Z | mA |
| Junction temperature | | | T_j | 200 | ? |
| Storage temperature range | | | T_{stg} | -65~+175 | ? |

Maximum Thermal Resistance

$T_j=25^\circ\text{C}$

| Parameter | Test Conditions | Symbol | Value | Unit |
|------------------|--|-------------------|-------|------|
| Junction ambient | $l=9.5\text{mm}(3/8")$ $T_L=\text{constant}$ | R_{thJA} | 100 | K/W |

Electrical Characteristics

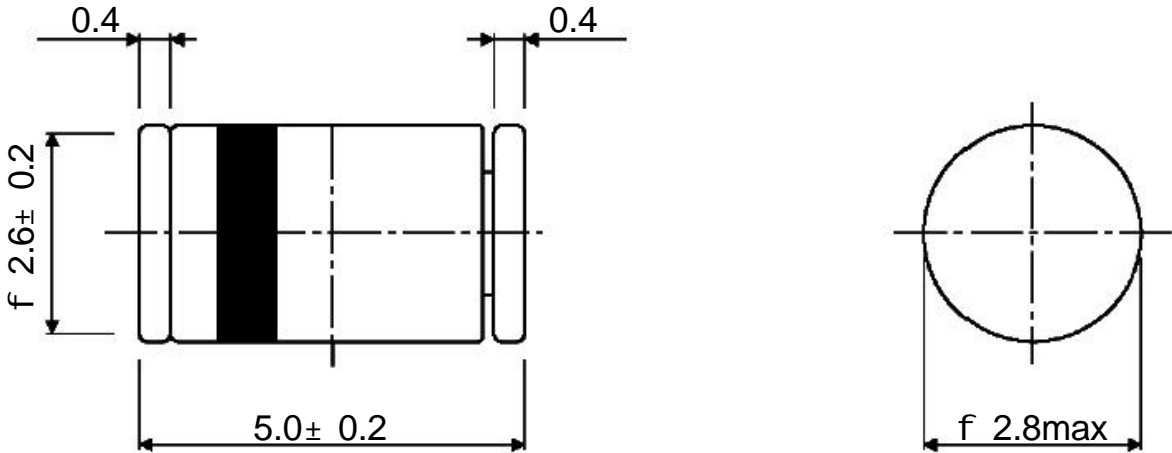
$T_j=25^\circ\text{C}$

| Parameter | Test Conditions | Type | Symbol | Min | Typ | Max | Unit |
|-----------------|--------------------|------|--------|-----|-----|-----|------|
| Forward voltage | $I_F=200\text{mA}$ | | V_F | | | 1.2 | V |

| Type | $V_{Znom}^{1)}$ | I_{ZT} | for | r_{zIT} | r_{zIK} | at | I_K | I_R | at | V_R |
|---------|-----------------|----------|-----|-----------|-----------|----|-------|---------|----|-------|
| | V | mA | | 0 | 0 | | mA | μA | | V |
| DL4728A | 3.3 | 76 | | <10 | <400 | | 1 | <100 | | 1 |
| DL4729A | 3.6 | 69 | | <10 | <400 | | 1 | <100 | | 1 |
| DL4730A | 3.9 | 64 | | <9 | <400 | | 1 | <50 | | 1 |
| DL4731A | 4.3 | 58 | | <9 | <400 | | 1 | <10 | | 1 |
| DL4732A | 4.7 | 53 | | <8 | <500 | | 1 | <10 | | 1 |
| DL4733A | 5.1 | 49 | | <7 | <550 | | 1 | <10 | | 1 |
| DL4734A | 5.6 | 45 | | <5 | <600 | | 1 | <10 | | 2 |
| DL4735A | 6.2 | 41 | | <2 | <700 | | 1 | <10 | | 3 |
| DL4736A | 6.8 | 37 | | <3.5 | <700 | | 1 | <10 | | 4 |
| DL4737A | 7.5 | 34 | | <4.0 | <700 | | 0.5 | <10 | | 5 |
| DL4738A | 8.2 | 31 | | <4.5 | <700 | | 0.5 | <10 | | 6 |
| DL4739A | 9.1 | 28 | | <5.0 | <700 | | 0.5 | <10 | | 7 |
| DL4740A | 10 | 25 | | <7 | <700 | | 0.25 | <10 | | 7.6 |
| DL4741A | 11 | 23 | | <8 | <700 | | 0.25 | <5 | | 8.4 |
| DL4742A | 12 | 21 | | <9 | <700 | | 0.25 | <5 | | 9.1 |
| DL4743A | 13 | 19 | | <10 | <700 | | 0.25 | <5 | | 9.9 |
| DL4744A | 15 | 17 | | <14 | <700 | | 0.25 | <5 | | 11.4 |
| DL4745A | 16 | 15.5 | | <16 | <700 | | 0.25 | <5 | | 12.2 |
| DL4746A | 18 | 14 | | <20 | <750 | | 0.25 | <5 | | 13.7 |
| DL4747A | 20 | 12.5 | | <22 | <750 | | 0.25 | <5 | | 15.2 |
| DL4748A | 22 | 11.5 | | <23 | <750 | | 0.25 | <5 | | 16.7 |
| DL4749A | 24 | 10.5 | | <25 | <750 | | 0.25 | <5 | | 18.2 |
| DL4750A | 27 | 9.5 | | <35 | <750 | | 0.25 | <5 | | 20.6 |
| DL4751A | 30 | 8.5 | | <40 | <1000 | | 0.25 | <5 | | 22.8 |
| DL4752A | 33 | 7.5 | | <45 | <1000 | | 0.25 | <5 | | 25.1 |
| DL4753A | 36 | 7.0 | | <50 | <1000 | | 0.25 | <5 | | 27.4 |
| DL4754A | 39 | 6.5 | | <60 | <1000 | | 0.25 | <5 | | 29.7 |
| DL4755A | 43 | 6.0 | | <70 | <1500 | | 0.25 | <5 | | 32.7 |
| DL4756A | 47 | 5.5 | | <80 | <1500 | | 0.25 | <5 | | 35.8 |
| DL4757A | 51 | 5.0 | | <95 | <1500 | | 0.25 | <5 | | 38.8 |
| DL4758A | 56 | 4.5 | | <110 | <2000 | | 0.25 | <5 | | 42.6 |
| DL4759A | 62 | 4.0 | | <125 | <2000 | | 0.25 | <5 | | 47.1 |
| DL4760A | 68 | 3.7 | | <150 | <2000 | | 0.25 | <5 | | 51.7 |
| DL4761A | 75 | 3.3 | | <175 | <2000 | | 0.25 | <5 | | 56 |

1) Based on DC-measurement at thermal equilibrium while maintaining the lead temperature(T_L) at 30° , 9.5mm(3/8") from the diode body.

Dimensions in mm



Standard Glass Case
JEDEC LL 41