

## GLASS ZENER DIODES

PEAK PULSE POWER:1000mW

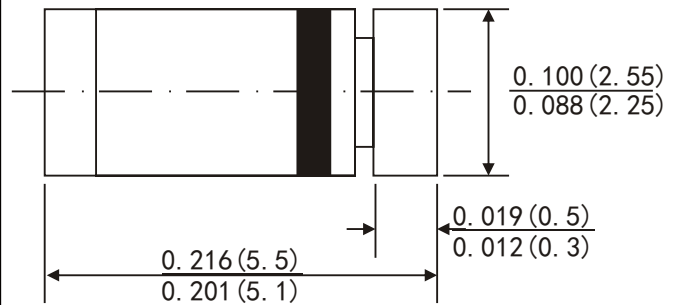
### FEATURES

- Low Reverse Leakage
- Low Zener Impedance
- Glass passivated junction
- High Stability and High Reliability

### MECHANICAL DATA

- Case: LL-41 (GLASS) molded glass body
- Polarity: Color band denotes cathode end
- Mounting Position: Any

LL41



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

| Parameters                     | Symbol | Value              | Unit |
|--------------------------------|--------|--------------------|------|
| Power Dissipation              | Pd     | 1000 <sup>1)</sup> | mW   |
| Operating junction temperature | Tj     | 175                | °C   |
| Storage temperature range      | Ts     | -55-+150           | °C   |

1) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case

## Electrical Specification (TA=25°C unless otherwise specified)

| TYPE     | Zener Voltage |                | Reverse Current |                | Dynamic Resistance |                |
|----------|---------------|----------------|-----------------|----------------|--------------------|----------------|
|          | Vz(V)         | Test Condition | IR(μA)          | Test Condition | rd(Ω)              | Test Condition |
|          | nom           | Iz(mA)         | Max.            | VR(V)          | Max.               | Iz(mA)         |
| DL4728A  | 3.3           | 76.0           | 100             | 1.0            | 10                 | 76.0           |
| DL 4729A | 3.6           | 69.0           | 100             | 1.0            | 10                 | 69.0           |
| DL 4730A | 3.9           | 64.0           | 50              | 1.0            | 9                  | 64.0           |
| DL 4731A | 4.3           | 58.0           | 10              | 1.0            | 9                  | 58.0           |
| DL 4732A | 4.7           | 53.0           | 10              | 1.0            | 8                  | 53.0           |
| DL 4733A | 5.1           | 49.0           | 10              | 1.0            | 7                  | 49.0           |
| DL 4734A | 5.6           | 45.0           | 10              | 2.0            | 5                  | 45.0           |
| DL 4735A | 6.2           | 41.0           | 10              | 3.0            | 2                  | 41.0           |

## RATINGS AND CHARACTERISTIC CURVES

Electrical Specification ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

| TYPE     | Zener Voltage |                | Reverse Current |                | Dynamic Resistance |               |
|----------|---------------|----------------|-----------------|----------------|--------------------|---------------|
|          | Vz(V)         | Test Condition | IR( $\mu$ A)    | Test Condition | rd( $\Omega$ )     | est Condition |
|          | nom           | Iz(mA)         | Max.            | VR(V)          | Max.               | Iz(mA)        |
| DL 4736A | 6.8           | 37.0           | 10              | 4.0            | 3.5                | 37.0          |
| DL 4737A | 7.5           | 34.0           | 10              | 5.0            | 4                  | 34.0          |
| DL 4738A | 8.2           | 31.0           | 10              | 6.0            | 4.5                | 31.0          |
| DL 4739A | 9.1           | 28.0           | 10              | 7.0            | 5                  | 28.0          |
| DL 4740A | 10            | 25.0           | 10              | 7.6            | 7                  | 25.0          |
| DL 4741A | 11            | 23.0           | 5               | 8.4            | 8                  | 23.0          |
| DL 4742A | 12            | 21.0           | 5               | 9.1            | 9                  | 21.0          |
| DL 4743A | 13            | 19.0           | 5               | 9.9            | 10                 | 19.0          |
| DL 4744A | 15            | 17.0           | 5               | 11.4           | 14                 | 17.0          |
| DL 4745A | 16            | 15.5           | 5               | 12.2           | 16                 | 15.5          |
| DL 4746A | 18            | 14.0           | 5               | 13.7           | 20                 | 14.0          |
| DL 4747A | 20            | 12.5           | 5               | 15.2           | 22                 | 12.5          |
| DL 4748A | 22            | 11.5           | 5               | 16.7           | 23                 | 11.5          |
| DL 4749A | 24            | 10.5           | 5               | 18.2           | 25                 | 10.5          |
| DL 4750A | 27            | 9.5            | 5               | 20.6           | 35                 | 9.5           |
| DL 4751A | 30            | 8.5            | 5               | 22.8           | 40                 | 8.5           |
| DL 4752A | 33            | 7.5            | 5               | 25.1           | 45                 | 7.5           |
| DL 4753A | 36            | 7.0            | 5               | 27.4           | 50                 | 7.0           |
| DL 4754A | 39            | 6.5            | 5               | 29.7           | 60                 | 6.5           |
| DL 4755A | 43            | 6.0            | 5               | 32.7           | 70                 | 6.0           |
| DL 4756A | 47            | 5.5            | 5               | 35.8           | 80                 | 5.5           |
| DL 4757A | 51            | 5.0            | 5               | 38.8           | 95                 | 5.0           |
| DL 4758A | 56            | 4.5            | 5               | 42.6           | 110                | 4.5           |
| DL 4759A | 62            | 4.0            | 5               | 47.1           | 125                | 4.0           |
| DL 4760A | 68            | 3.7            | 5               | 51.7           | 150                | 3.7           |
| DL 4761A | 75            | 3.3            | 5               | 56.0           | 175                | 3.3           |
| DL 4762A | 82            | 3.0            | 5               | 62.2           | 200                | 3.0           |
| DL 4763A | 91            | 2.8            | 5               | 69.2           | 250                | 2.8           |
| DL 4764A | 100           | 2.5            | 5               | 76.0           | 350                | 2.5           |

Notes:

- 1) Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.
- 2) Measured under thermal equilibrium and DC test conditions.
- 3) The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equiv-alent sine wave pulse of 1/120 second duration superimposed on the test current, IZT ,per JEDEC registration; however, actual device capability is as described in Fiure 5 of the General Data-DO-41 Glass.



## RATINGS AND CHARACTERISTIC CURVES

4) Tested with pulses  $t_p = 20$  ms.

5)  $V_F(\text{Max}) = 1.20\text{V} @ I_F = 200\text{mA}$

\* Measure under thermal equilibrium and DC current test conditions ( $T_A = 25^\circ\text{C}$ )

Tolerance on nominal  $V_z$  value:  $\pm 5\%$ .

Tight tolerances on preferred voltages: DL47...C:  $\pm 2\%$ ;

DL47...D:  $\pm 1\%$ .

These diodes are also available in DO-41 case with the type designation 1N4728...1N4764