

FDLL3595

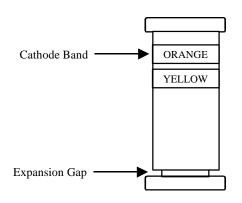
General Description:

A General Purpose diode that couples high forward conductance fast switching speed and high blocking voltages in a glass leadless LL-34 Surface Mount package.

Placement of the Expansion Gap has no relationship to the location of the Cathode Terminal which is indicated by the first color band.

High Conductance, Low Leakage Diode

Absolute Maximum Ratings* TA = 25°C unless otherwise noted



FDLL3595 - Rev. A

| Sym | Parameter | Value | Units |
|-----------------------|--|-------------|--------------------|
| T_{stg} | Storage Temperature | -65 to +200 | °C |
| T _J | Operating Junction Temperature | -65 to +200 | οС |
| P_{D} | Total Power Dissipation at T _A = 25°C | 500 | mW |
| | Linear Derating Factor from T _A = 25°C | 3.33 | mW/ ^O C |
| R _{OJA} | Thermal Resistance Junction-to-Ambient | 350 | °C/W |
| W _{iv} | Working Inverse Voltage | 125 | V |
| Io | Average Rectified Current | 200 | mA |
| I _F | DC Forward Current (IF) | 500 | mA |
| i _f | Recurrent Peak Forward Current | 600 | mA |
| i _{F(surge)} | Peak Forward Surge Current (IFSM) Pulse Width = 1.0 second | 1.0 | Amp |
| | Pulse Width = 1.0 microsecond | 4.0 | Amp |

^{*}These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

Electrical Characteristics

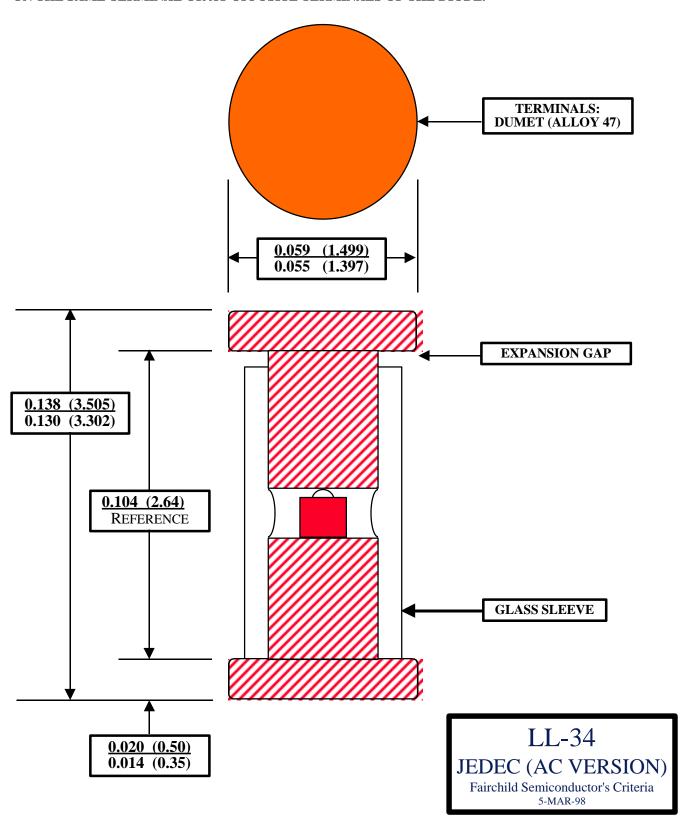
TA = 25°C unless otherwise noted

| SYM | CHARACTERISTICS | MIN | MAX | UNITS | TEST CONDITIONS |
|-------------------|-----------------------|---|---|----------------------|---|
| B _V I | Breakdown Voltage | 150 | | V | $I_R = 100 \text{ uA}$ |
| I _R I | Reverse Leakage | | 1.0 300 500 3.0 | nA nA nA uA | $V_R = 125 V$ $V_R = 30 V T_A = 125^{\circ}C$ $V_R = 125 V T_A = 125^{\circ}C$ $V_R = 180 V T_A = 150^{\circ}C$ |
| V _F F | Forward Voltage | 520 600 650 750 790 0.83 | 680 750 800 880 920 1.00 | mV mV mV mV | $I_F = 1.0 \text{ mA}$ $I_F = 5.0 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 50 \text{ mA}$ $I_F = 100 \text{ mA}$ $I_F = 200 \text{ mA}$ |
| C _T (| Capacitance | | 8.0 | pF | $V_{R} = 0.0 \text{ V}, f = 1.0 \text{ MHz}$ |
| T _{RR} I | Reverse Recovery Time | | 3.0 | us | $I_F = 10 \text{ mA } V_R = 3.5 \text{ V}$ $R_L = 1.0 \text{ kOhms}$ |

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THE PLACEMENT OF THE EXPANSION GAP HAS NO RELATIONSHIP TO THE LOCATION OF THE CATHODE TERMINAL OF THE DEVICE. THE EXPANSION GAP & CATHODE BAND CAN BE ON THE SAME TERMINAL OR AT OPPOSITE TERMINALS OF THE DIODE.



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PRODUCT STATUS DEFINITIONS

Definition of Terms

| Datasheet Identification | Product Status | Definition | | | |
|--------------------------|---------------------------|---|--|--|--|
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