

# **FDLL3595**

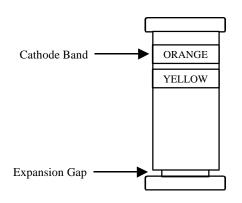
### **General Description:**

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 <sub>J</sub>	Operating Junction Temperature	-65 to +200	οС
$P_{D}$	Total Power Dissipation at T <sub>A</sub> = 25°C	500	mW
	Linear Derating Factor from T <sub>A</sub> = 25°C	3.33	mW/ <sup>O</sup> C
R <sub>OJA</sub>	Thermal Resistance Junction-to-Ambient	350	°C/W
W <sub>iv</sub>	Working Inverse Voltage	125	V
Io	Average Rectified Current	200	mA
I <sub>F</sub>	DC Forward Current (IF)	500	mA
i <sub>f</sub>	Recurrent Peak Forward Current	600	mA
i <sub>F(surge)</sub>	Peak Forward Surge Current (IFSM) Pulse Width = 1.0 second	1.0	Amp
	Pulse Width = 1.0 microsecond	4.0	Amp

<sup>\*</sup>These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

## **Electrical Characteristics**

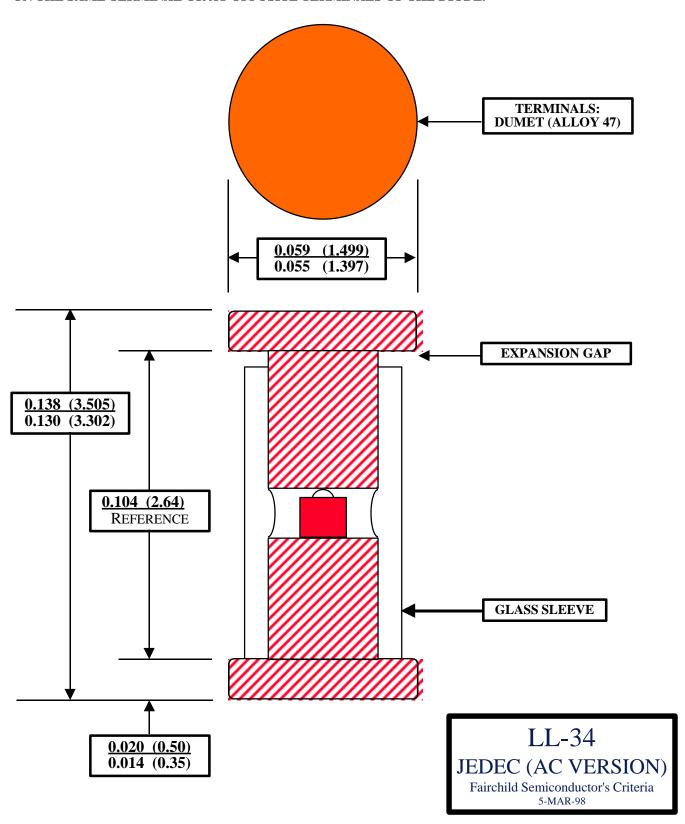
TA = 25°C unless otherwise noted

SYM	CHARACTERISTICS	MIN	MAX	UNITS	TEST CONDITIONS
B <sub>V</sub> I	Breakdown Voltage	150		V	$I_R = 100 \text{ uA}$
I <sub>R</sub> 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 <sub>F</sub> 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 <sub>T</sub> (	Capacitance		8.0	pF	$V_{R} = 0.0 \text{ V}, f = 1.0 \text{ MHz}$
T <sub>RR</sub> 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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