

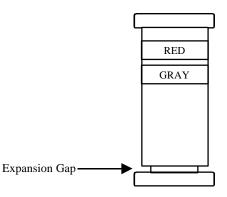
SEMICONDUCTOR IM

# FDLL485B

#### **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

Sym	Parameter	Value	Units
T <sub>stg</sub>	Storage Temperature	-65 to +200	°C
TJ	Operating Junction Temperature	-65 to +200	°C
P <sub>D</sub>	Total Power Dissipation at $T_A = 25^{\circ}C$	500	mW
	Linear Derating Factor from $T_A = 25^{\circ}C$	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	180	V
I <sub>o</sub>	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
. 54	Pulse Width = 1.0 microsecond	4.0	Amp

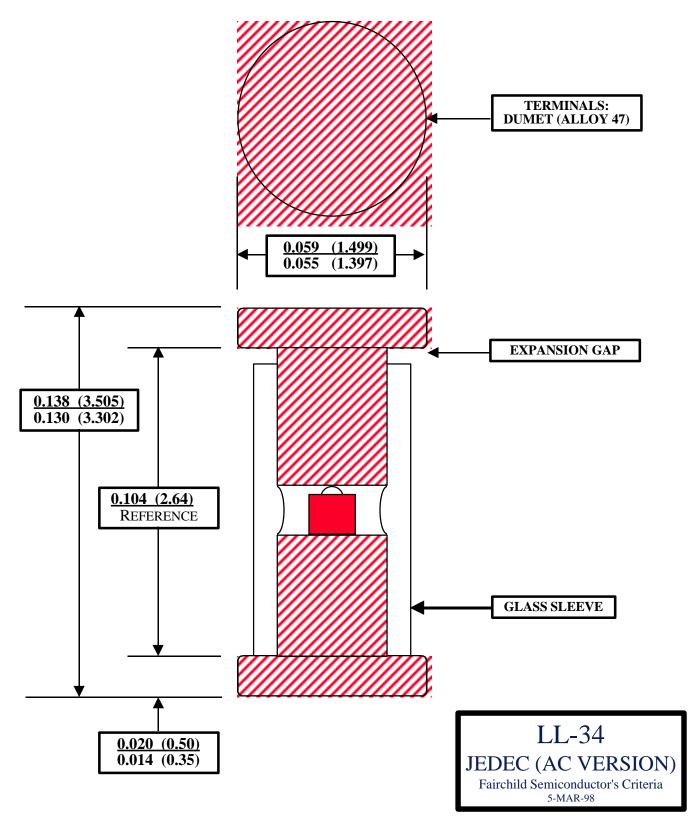
\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

### **Electrical Characteristics** TA = 25<sup>o</sup>C unless otherwise noted

SYM CHARACTERISTICS	MIN	МАХ	UNITS	TEST CONDITIONS	
B <sub>v</sub> Breakdown Voltage	200		V	I <sub>R</sub> = 100 uA	
I <sub>R</sub> Reverse Leakage		25 5.0	nA uA	$V_{R} = 180 V$ $V_{R} = 180 V T_{A} = 150^{\circ}C$	
V <sub>F</sub> Forward Voltage		1.00	V	I <sub>F</sub> = 100 mA	
C <sub>T</sub> Capacitance		6.0	pF	$V_{R} = 0.0 V, f = 1.0 MHz$	
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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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FASTr™ GlobalOptoisolator™ GTO™ HiSeC™ **ISOPLANAR™** MICROWIRE™ OPTOLOGIC™ **OPTOPLANAR™** PACMAN™ POP™

PowerTrench<sup>®</sup> QFET™ QS™ QT Optoelectronics<sup>™</sup> Quiet Series<sup>™</sup> SILENT SWITCHER® SMART START™ SuperSOT<sup>™</sup>-3 SuperSOT<sup>™</sup>-6 SuperSOT<sup>™</sup>-8

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#### PRODUCT STATUS DEFINITIONS

**Definition of Terms** 

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.
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