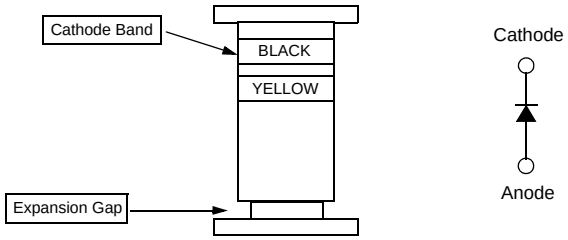
FAIRCHILD SEMICONDUCTOR®

September 2012

FDLL4151
Small Signal Diode

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.



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

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	75	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Current Pulse Width = 1.0 second Pulse Width = 1.0microsecond	 1.0 4.0	 A A
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	-65 to +200	°C

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

NOTES:

1. These ratings are based on a maximum junction temperature of 200 degrees C.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	350	°C/W

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	I_R = 5μA	75		V
V_F	Forward Voltage	I_F = 50mA		1	V
I_R	Reverse Current	V_R = 50V V_R = 30V, T_A = 150°C		50 50	nA μA
C_T	Total Capacitance	V_R = 0, f = 1.0MHz		4	pF
t_{rr1}	Reverse Recovery Time	I_F = I_R = 10mA, I_{RR} = 1mA R_L = 100Ω		4	ns
t_{rr2}	Reverse Recovery Time	V_R = 6V, I_F = 10mA, I_{RR} = 1mA R_L = 100Ω		2	ns

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Definition of Terms

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

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