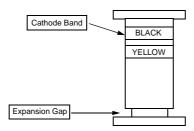


# **FDLL4151**

# **Small Signal Diode**

## **General Description**

A general purpose diode that couples high forward conductance fast swiching 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 * Ta = 25°C unless otherwise noted  Symbol Parameter Value Units				
Symbol	Parameter	Value	Units	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	75	V	
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA	
I <sub>FSM</sub>	Non-repetitive Peak Forward Current Pulse Width = 1.0 second Pulse Width = 1.0microsecond	1.0 4.0	A A	
T <sub>STG</sub>	Storage Temperature Range	-65 to +200	°C	
T <sub>J</sub>	Operating Junction Temperature	-65 to +200	°C	

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

#### NOTES:

## **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<sub>C</sub> = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V <sub>R</sub>	Breakdown Voltage	$I_R = 5\mu A$	75		V
$V_{F}$	Forward Voltage	I <sub>F</sub> = 50mA		1	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 50V V <sub>R</sub> = 30V, T <sub>A</sub> = 150°C		50 50	nA μA
C <sub>T</sub>	Total Capacitance	V <sub>R</sub> = 0, f = 1.0MHz		4	pF
t <sub>rr1</sub>	Reverse Recovery Time	$I_F = I_R = 10$ mA, $I_{RR} = 1$ mA $R_L = 100$ $\Omega$		4	ns
t <sub>rr2</sub>	Reverse Recovery Time	$V_R = 6V$ , $I_F = 10$ mA, $I_{RR} = 1$ mA $R_L = 100\Omega$		2	ns

<sup>1.</sup> These ratings are based on a maximum juction temperature of 200 degrees C.

<sup>2.</sup> These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

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## PRODUCT STATUS DEFINITIONS

## **Definition of Terms**

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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.
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