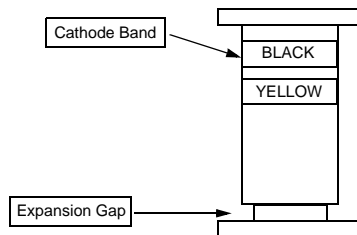


FDLL4151

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 * $T_a = 25^\circ\text{C}$ 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	A
		4.0	A
T_{STG}	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
T_J	Operating Junction Temperature	-65 to +200	$^\circ\text{C}$

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

NOTES:

- These ratings are based on a maximum junction temperature of 200 degrees C.
- 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	$^\circ\text{C}/\text{W}$

Electrical Characteristics $T_C = 25^\circ\text{C}$ unless otherwise noted

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

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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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