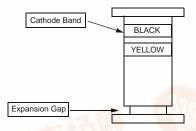


FDLL4151

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

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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 GOM
T _{STG}	Storage Temperature Range	-65 to +200	°C
TJ	Operating Junction Temperature	-65 to +200	°C

^{*} 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_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V _R	Breakdown Voltage	$I_R = 5\mu A$	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	$I_F = I_R = 10$ mA, $I_{RR} = 1$ mA $R_L = 100$ Ω		4	ns
)PDF	Reverse Recovery Time	$V_R = 6V$, $I_F = 10$ mA, $I_{RR} = 1$ mA $R_L = 100\Omega$		2	ns

^{1.} These ratings are based on a maximum juction 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.

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
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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.
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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