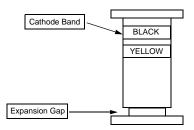


FDLL4151

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
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:

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	$I_F = I_R = 10$ mA, $I_{RR} = 1$ mA $R_L = 100$ Ω		4	ns
t _{rr2}	Reverse Recovery Time	$V_R = 6V$, $I_F = 10mA$, $I_{RR} = 1mA$ $R_L = 100\Omega$		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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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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