

# 1N/FDLL 914/A/B / 916/A/B / 4148 / 4448





DO-35 Cathode is denoted with a black band

LL-34 THE PLACEMENT OF THE EXPANSION GAP HAS NO RELATIONSHIP TO THE LOCATION OF THE CATHODE TERMINAL

LL-34 COLOR BAND MARKING				
DEVICE	1ST BAND	2ND BAND		
FDLL914	BLACK	BROWN		
FDLL914A	BLACK	GRAY		
FDLL914B	BROWN	BLACK		
FDLL916	BLACK	RED		
FDLL916A	BLACK	WHITE		
FDLL916B	BROWN	BROWN		
FDLL4148	BLACK	BROWN		
FDLL4448	BROWN	BLACK		
-1st band denotes cathode terminal				

and has wider width

# **Small Signal Diode**

# Absolute Maximum Ratings \* T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	100	V	
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA	
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0	A	
T <sub>STG</sub> Storage Temperature Range		-65 to +200	°C	
TJ	Operating Junction Temperature	175	°C	

\* These ratings are limiting values above which the serviceability of the diode may be impaired.

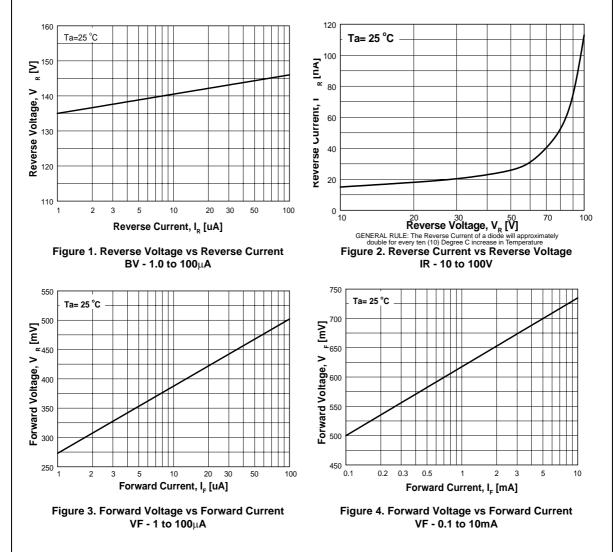
NOTES:
1) These ratings are based on a maximum junction temperature of 200 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

# **Thermal Characteristics**

Symbol	Parameter	Max.	Units
Symbol	Falameter	1N/FDLL 914/A/B / 4148 / 4448	Units
PD	Power Dissipation	500	mW
$R_{ hetaJA}$	Thermal Resistance, Junction to Ambient	300	°C/W

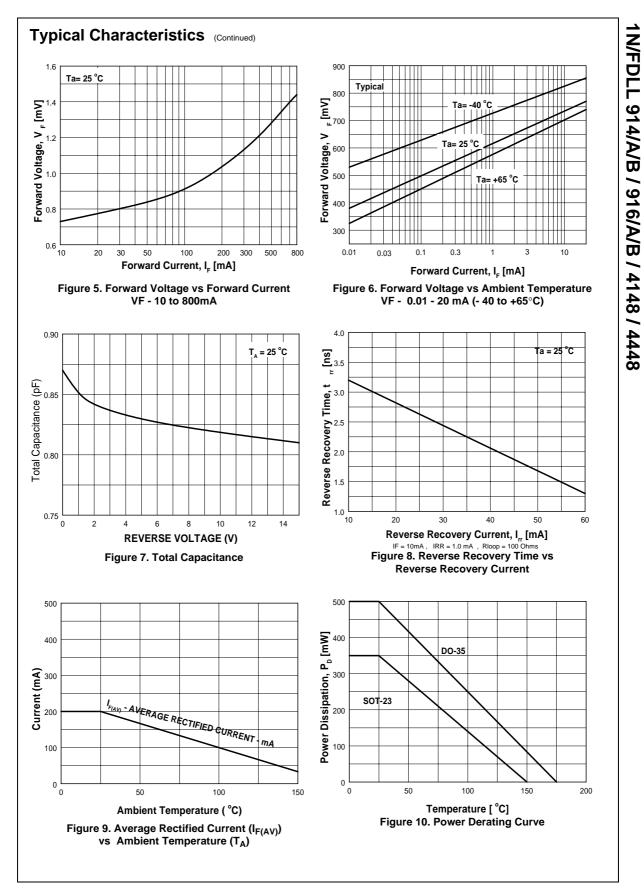
Symbol	Parame	eter	Test Conditions	Min.	Max.	Units
V <sub>R</sub>	Breakdown Voltage		I <sub>R</sub> = 100μA	100		V
			I <sub>R</sub> = 5.0μA	75		V
V <sub>F</sub>	Forward Voltage	1N914B/4448	I <sub>F</sub> = 5.0mA	620	720	mV
·	-	1N916B	I <sub>F</sub> = 5.0mA	630	730	mV
		1N914/916/4148	$I_F = 10 \text{mA}$		1.0	V
		1N914A/916A	$I_F = 20 \text{mA}$		1.0	V
		1N916B	$I_F = 20 \text{mA}$		1.0	V
		1N914B/4448	I <sub>F</sub> = 100mA		1.0	V
I <sub>R</sub>	Reverse Leakage		V <sub>R</sub> = 20V		25	nA
			V <sub>R</sub> = 20V, T <sub>A</sub> = 150°C		50	μΑ
			V <sub>R</sub> = 75V		5.0	μΑ
С <sub>т</sub>	Total Capacitance					
		1N916A/B/4448	V <sub>R</sub> = 0, f = 1.0MHz		2.0	pF
		1N914A/B/4148	$V_{R} = 0, f = 1.0MHz$		4.0	pF
t <sub>rr</sub>	Reverse Recovery Tir	ne	$I_F = 10mA, V_R = 6.0V (600mA)$ $I_{rr} = 1.0mA, R_L = 100\Omega$		4.0	ns

# **Typical Characteristics**



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