DATA SHEET

SEMICONDUCTOR

LL4148/LL4448/LL914B

500 mW LL-34 Hermetically Sealed Glass Fast Switching Diodes



SURFACE MOUNT
LL34

DEVICE MARKING DIAGRAM



Cathode Band Color : Black

Absolute Maximum Ratings

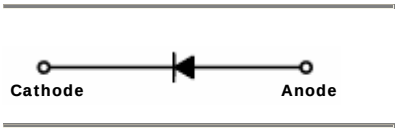
T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	+175	°C
W_{IV}	Working Inverse Voltage	75	V
I_O	Average Rectified Current	150	mA
I_{FM}	Non-repetitive Peak Forward Current	450	mA
I_{FSURGE}	Peak Forward Surge Current	2	A

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

Specification Features:

- Fast Switching Device (T_{RR} <4.0 nS)
- LL-34 (Mini-MELF) Package
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- 1st band indicates negative polarity



ELECTRICAL SYMBOL

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	I_R=100µA	100		Volts
		I_R=5µA	75		
I_R	Reverse Leakage Current	V_R=20V		25	nA
		V_R=75V		5	µA
V_F	Forward Voltage LL4448, LL914B	I_F=5mA	0.62	0.72	Volts
	LL4148	I_F=10mA		1.0	
	LL4448, LL914B	I_F=100mA		1.0	
T_{RR}	Reverse Recovery Time	I_F=I_R=10mA, R_L=100Ω, I_{RR}=1mA		4	nS
C	Capacitance	V_R=0V, f=1M_{HZ}		4	pF

DEVICE CHARACTERISTICS

LL4148/LL4448/LL914B

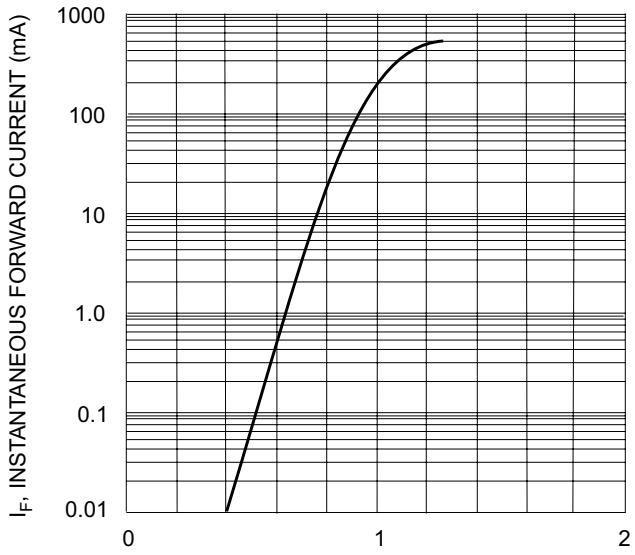


Fig. 1 Forward Characteristics

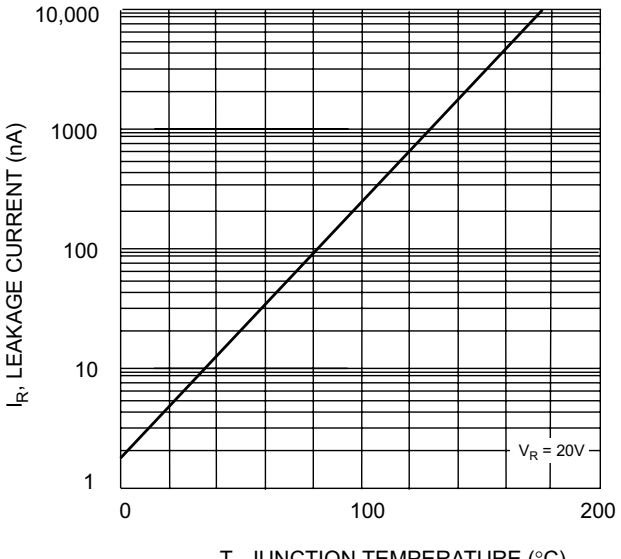
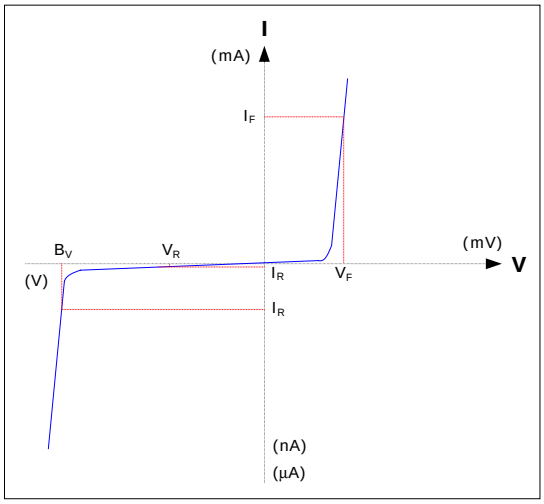


Fig. 2, Leakage Current vs Junction Temperature

Electrical Symbol Definition

Symbol	Parameter
B_V	Breakdown Voltage @ I_R
I_R	Reverse Leakage Current @ V_R
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F

Typical Characteristics



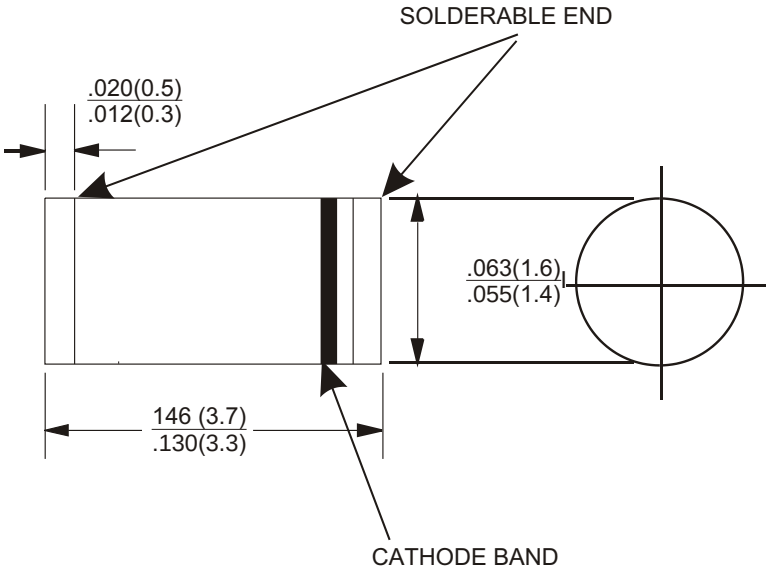
LL34 (Mini-MELF) Tape Packaging Standards

This standard practices for surface-mount tape packaging of leadless (Mini-MELF) components meets the requirements of EIA Standard RS-481-A.

PACKAGE OUTLINE & DIMENSIONS

LL4148/LL4448/LL914B

LL-34



Unit:inch(mm)