

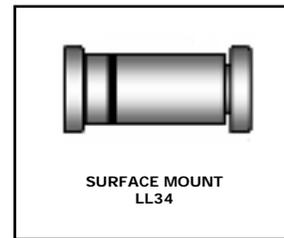
500 mW LL-34 Hermetically Sealed Glass Fast Switching Diodes

Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
T_{STG}	Storage Temperature Range	-65 to +200	$^\circ\text{C}$
T_J	Operating Junction Temperature	+175	$^\circ\text{C}$
V_R	Working Inverse Voltage	75	V
V_{RRM}	Repetitive Peak Reverse Voltage	100	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.

LL4148/LL4448



Specification Features:

- Fast Switching Device ($T_{RR} < 4.0 \text{ nS}$)
- 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
- We declare that the material of product compliance with RoHS requirements.

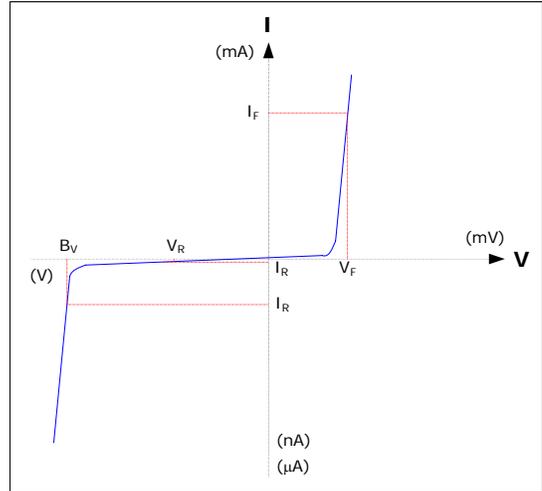
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

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

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



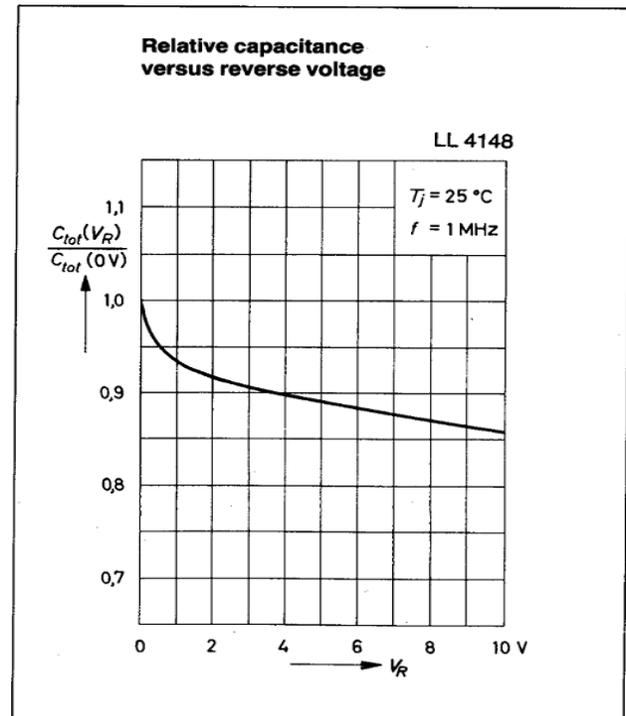
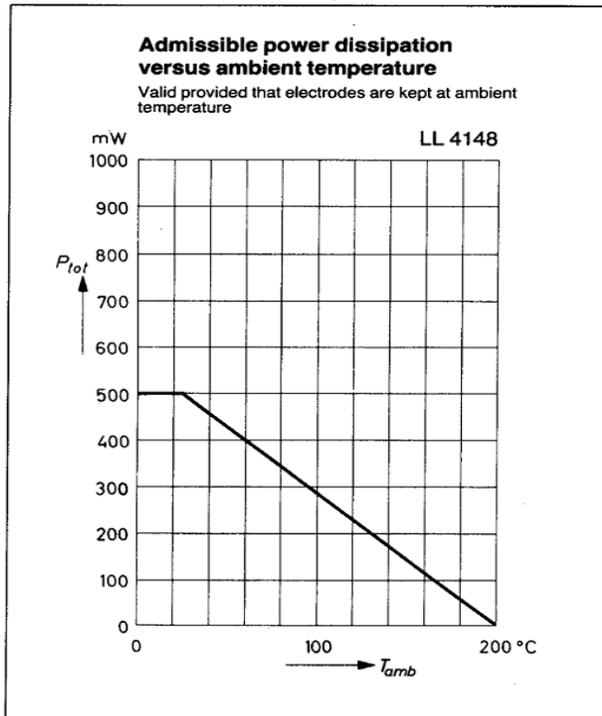
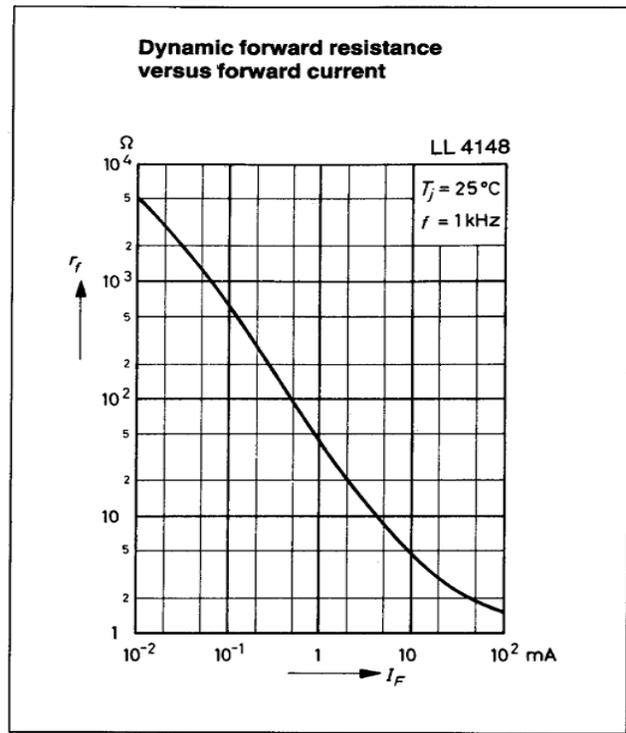
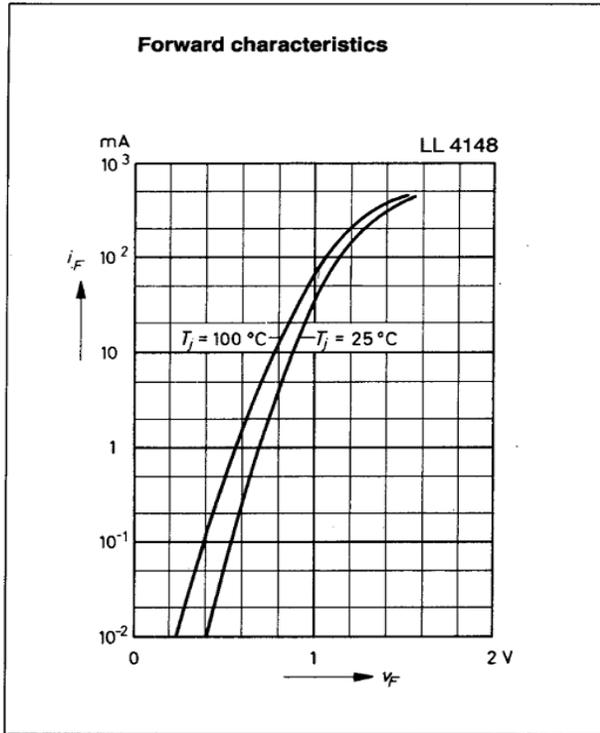
Ordering Information

Device	Pack Option	Package	Quantity
LL4148 LL4448	7" Reel	Tape and Reel	2,500

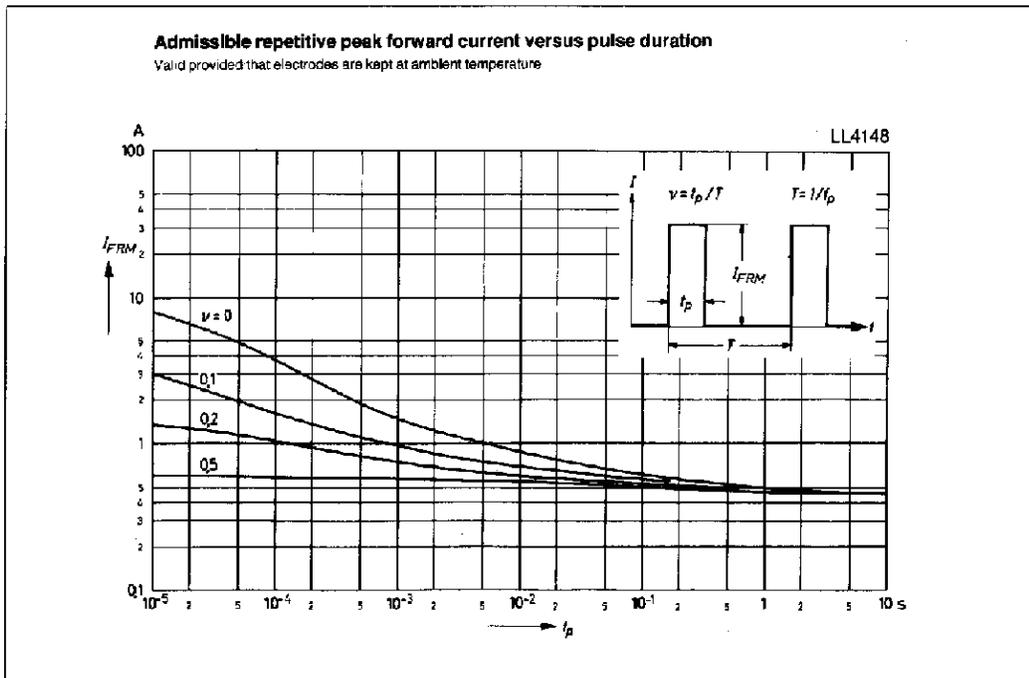
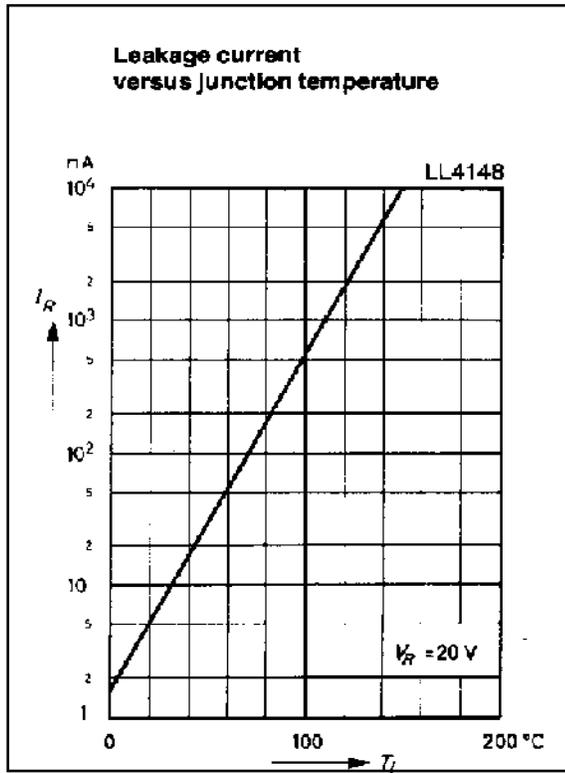
LL34 (Mini-MELF) Tape Packaging Standards

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

LL4148/LL4448

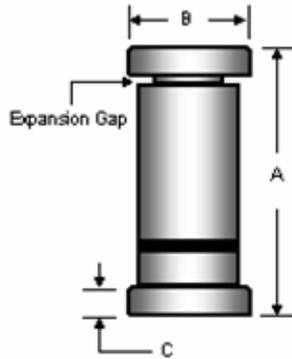


LL4148/LL4448



LL4148/LL4448
Package

LL-34



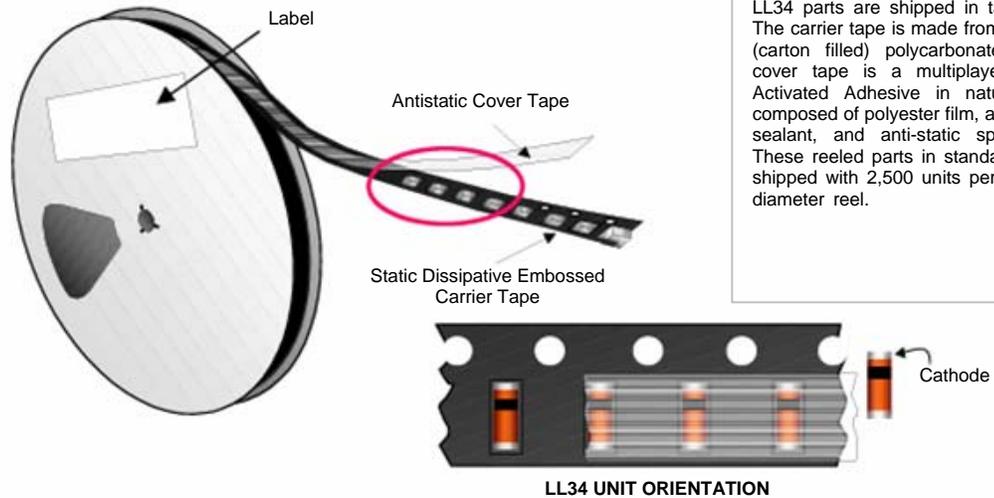
DIM	LL-34			
	Millimeters		Inches	
	Min	Max	Min	Max
A	3.302	3.505	0.130	0.138
B	1.39	1.54	0.054	0.060
C	0.350	0.500	0.014	0.020

Notes:

1. LL34 polarity denoted by a band.
2. 'Expansion Gap' has no relation to the location of polarity.

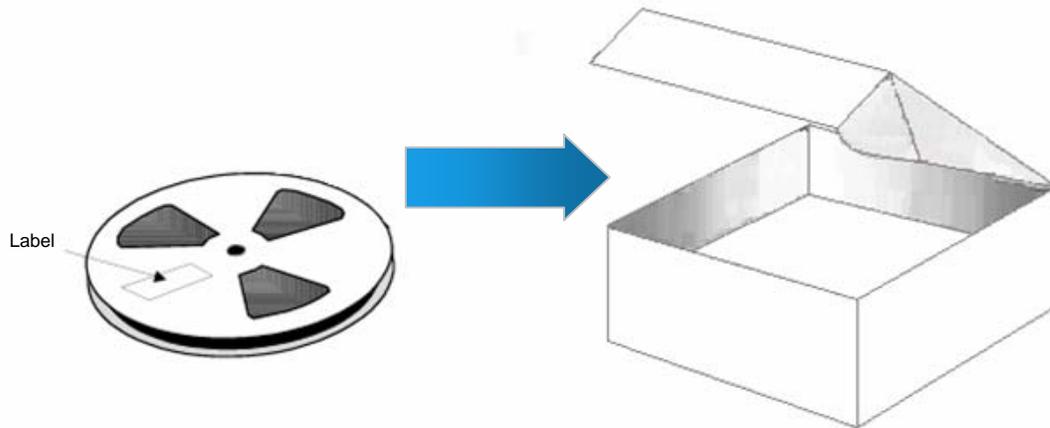
LL-34 (Mini-MELF) Tape & Reel Packaging Information

LL-34 Packaging Outline

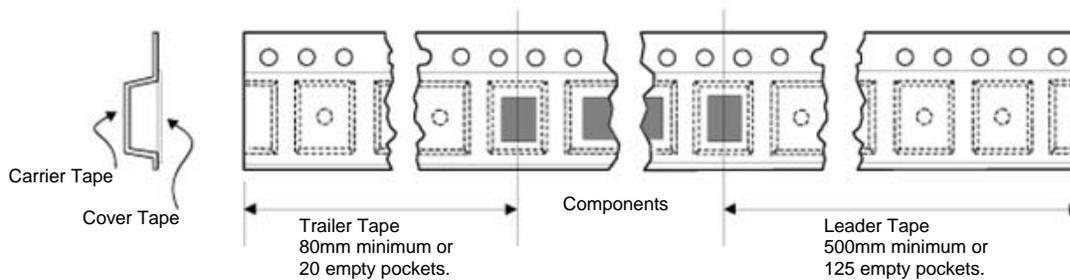


Packaging Description:

LL34 parts are shipped in tape and reel. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multiplayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 2,500 units per 7" or 178cm diameter reel.

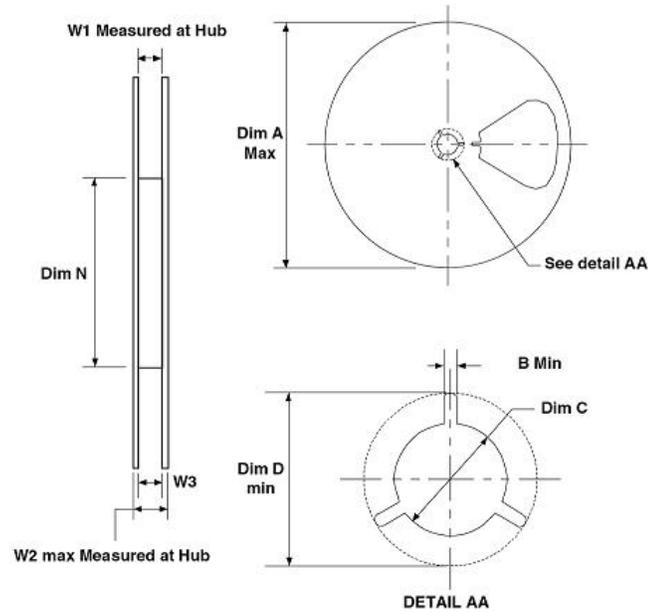


LL-34 Leader and Trailer



LL-34 (Mini-MELF) Tape & Reel Packaging Information

LL-34 Reel Outline



Dimensions are in millimeters

Tape Size	QTY Option	Dim A	Dim B	Dim C	Dim D	Dim N	W1	W2	W3
8mm	2,500	178	1.5	13	20.2	55	8.4	14.4	7.9 – 10.9