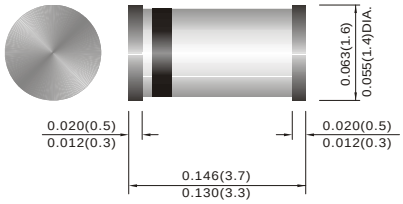
LL4148

FAST SWITCHING SURFACE MOUNT DIODES

VOLTAGE	100 Volt	POWER	500 mWatt

MINI-MELF / LL34 Unit : inch(mm)



FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxal Planar Construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: Mini Melf, Glass
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Marking: Cathode Band Only
- Weight: 0.001 ounce, 0.03 gram
- Packing information

T/R - 2.5K per 7" plastic reel

T/R - 10K per 13" plastic reel

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_J =25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Peak Reverse Voltage	V_{RM}	100	V
Maximum Average Forward Current at T_A=25°C And f ≥50Hz	$I_{F(AV)}$	150	mA
Surge Forward Current at t < 1s and T_J=25 °C	I_{FSM}	500	mA
Power Dissipation at T_A= 25°C	P_{TOT}	500	mW
Maximum Forward Voltage at I_F=10mA	V_F	1	V
Maximum Leakage Current at V_R=20V at V_R=75V at V_R=20V ,T_J= 150°C at V_R=100V	I_R	 25 5 50 100	 nA µA µA µA
Maximum Capacitance at V_F =V_R=0	C_J	4	pF
Maximum Reverse Recovery Time From I_F =-I_R =10mA to I_{RR}=-1mA ,V_R=6V R_L=100 Ω	t_{rr}	4	ns
Typical Thermal Resistance	$R_{\theta JA}$	300	°C / W
Junction Temperature and Storage Temperature Range	T_J,T_S	-65 to +175	°C

NOTE:

1. CJ at V_R=0, f=1MHZ
2. From I_F=10mA to I_R=1mA, V_R=6Volts, R_L=100Ω

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RATING AND CHARACTERISTIC CURVES

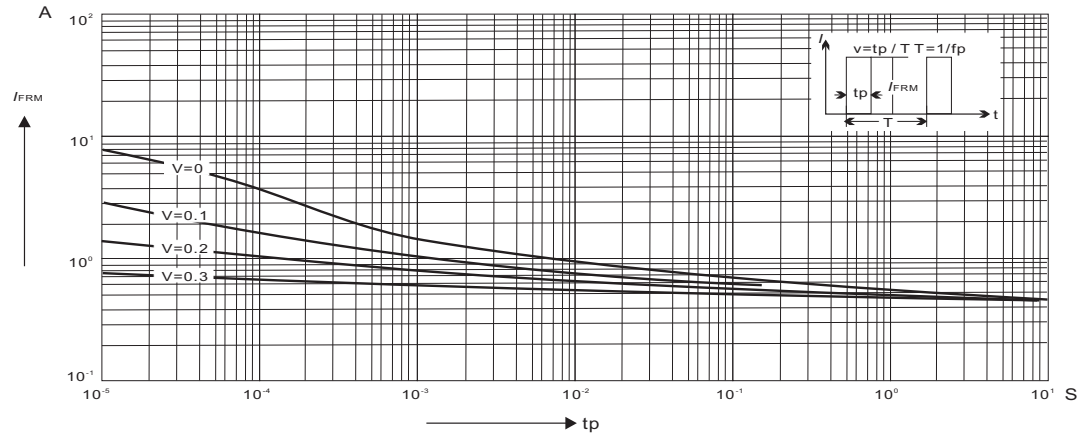

Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

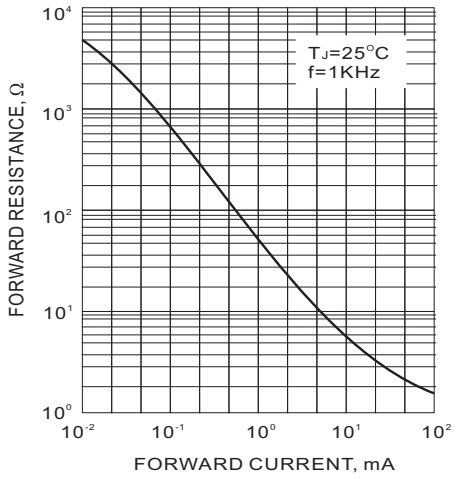

Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

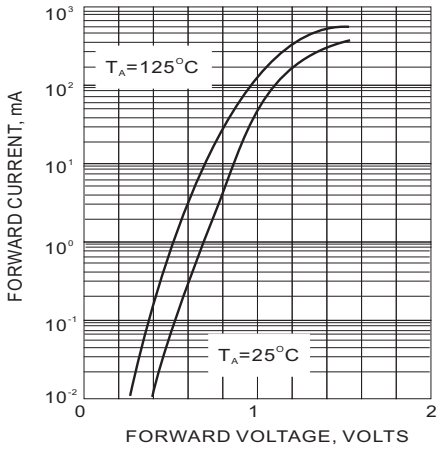

Fig.3 FORWARD CHARACTERISTICS

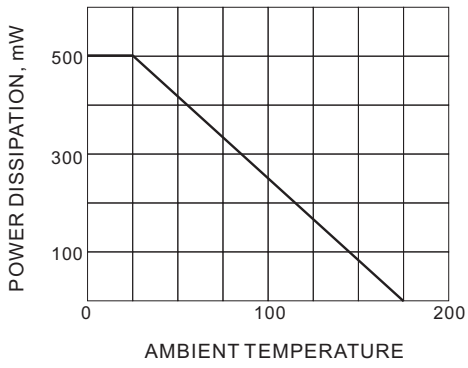

Fig.4 DERATING CURVE

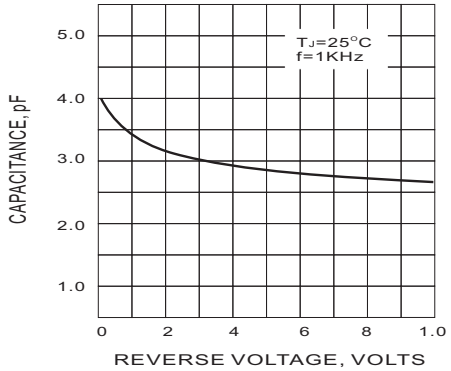

Fig.5 TYPICAL JUNCTION CAPACITANCE

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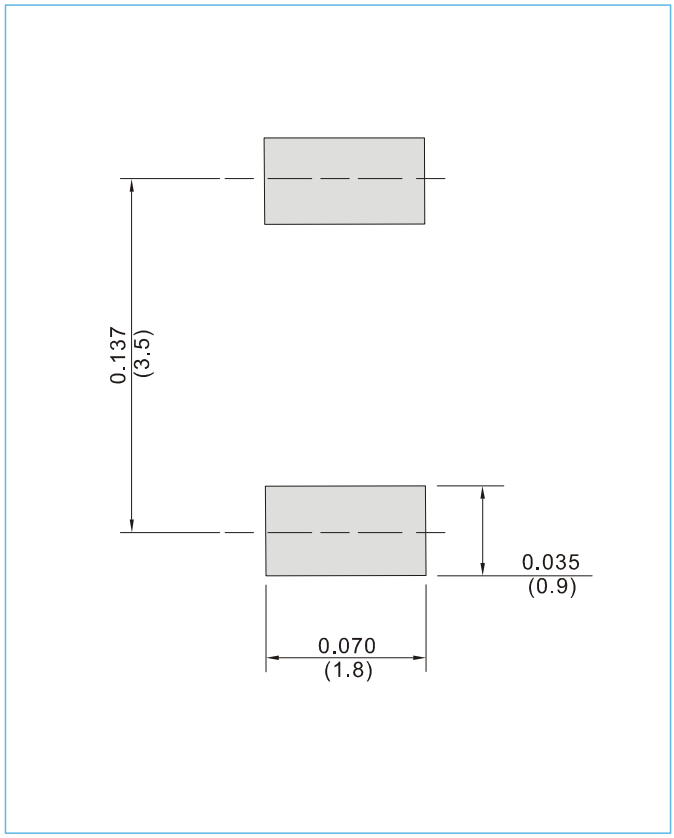
MOUNTING PAD LAYOUT

MINI-MELF / LL34 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 2.5K per 7" plastic Reel

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Part No_packing code_Version

LL4148_R1_10001

LL4148_R2_10001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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