

LL4148

FAST SWITCHING SURFACE MOUNT DIODES

VOLTAGE 100 Volt **POWER** 500 mWatt

MINI-MELF / LL34 Unit : inch(mm)

FEATURES

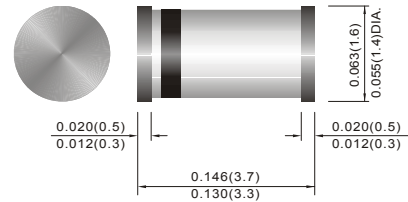
- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive

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	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
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	I _R	25	nA
at V _R =20V		5	μA
at V _R =75V		50	μA
at V _R =20V , T _J = 150°C		100	μA
at V _R =100V			
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 _{θJA}	300	°C / W
Junction Temperature and Storage Temperature Range	T _J , T _S	-65 to +175	°C

NOTE:

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

LL4148

RATING AND CHARACTERISTIC CURVES

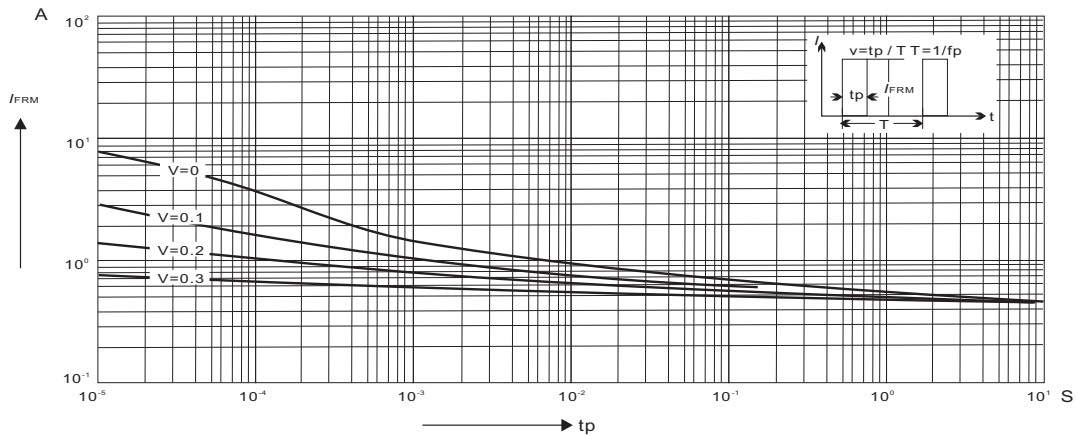


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

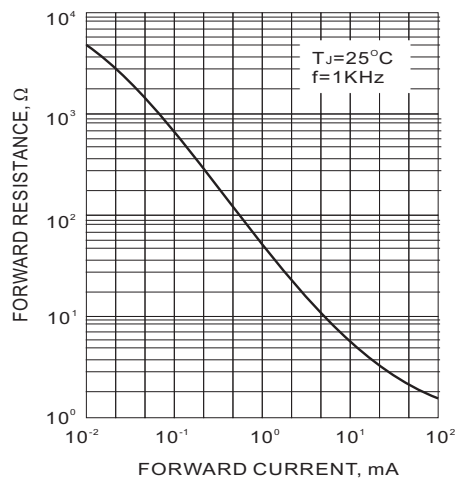


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

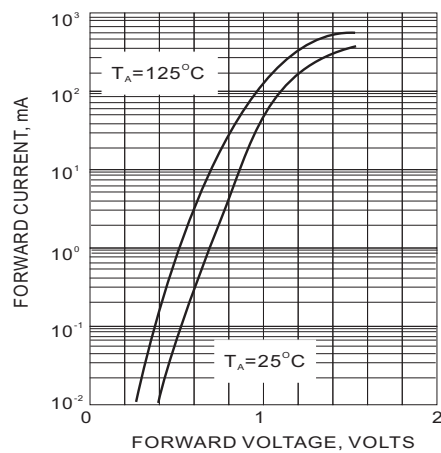


Fig.3 FORWARD CHARACTERISTICS

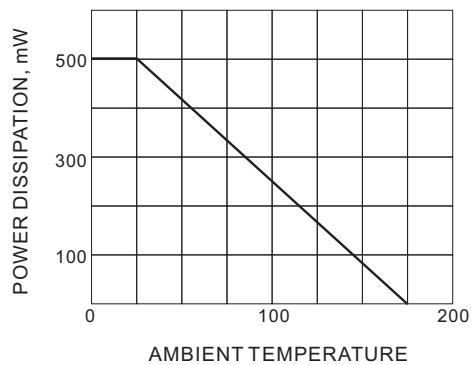


Fig.4 DERATING CURVE

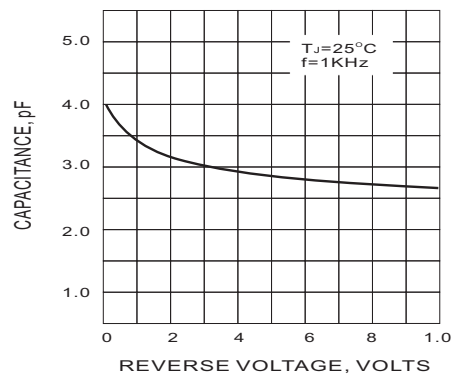


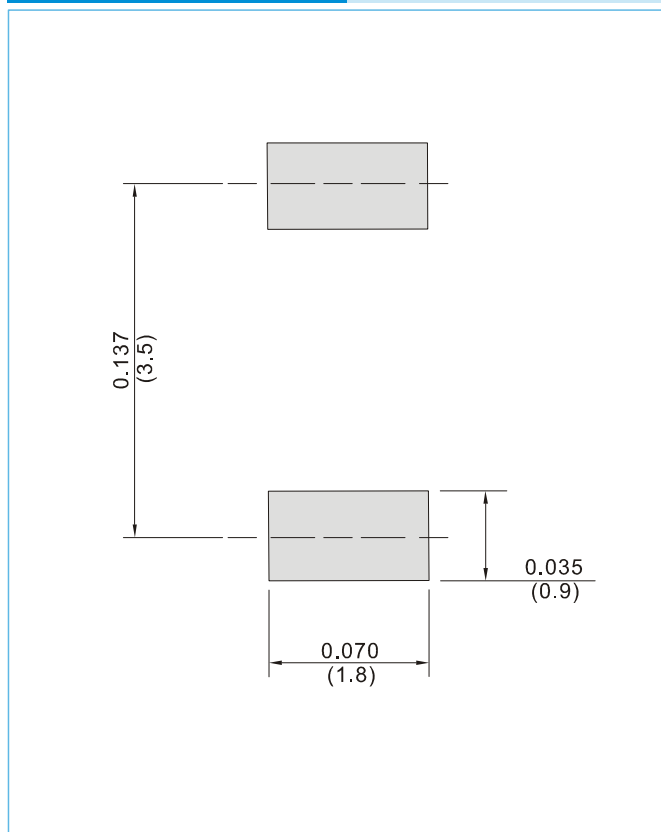
Fig.5 TYPICAL JUNCTION CAPACITANCE

LL4148

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

LL4148

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	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



LL4148

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