

LL4148

FAST SWITCHING SURFACE MOUNT DIODES

VOLTAGE 100 Volts **POWER** 500 mWatts

MINI-MELF/LL-34 Unit : inch (mm)

FEATURES

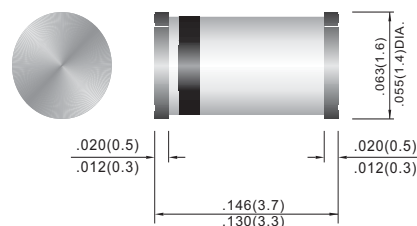
- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: Mini Melf, Glass
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.03 grams
- 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	LL4148	UNITS
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 Tamb= 25 °C	P _{TOT}	500	mW
Maximum Forward Voltage at I _F =10mA	V _F	1.0	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 _{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

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RATING AND CHARACTERISTIC CURVES

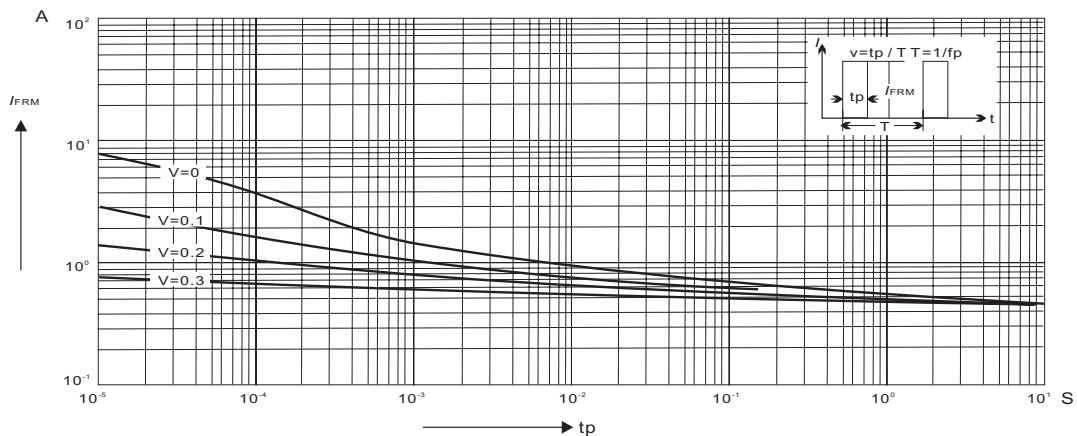


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

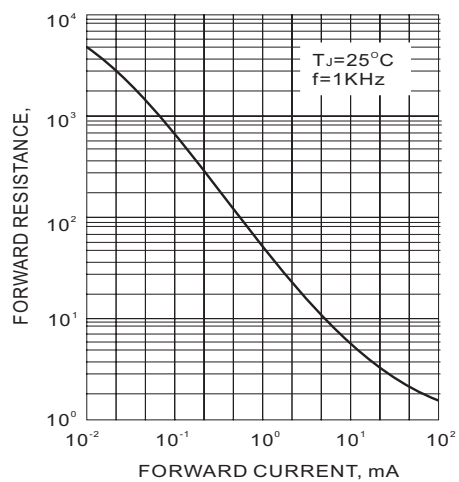


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

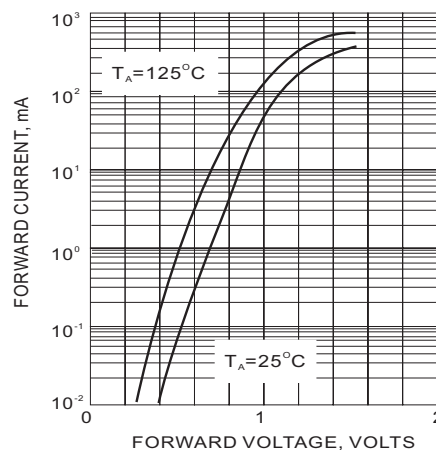


Fig.3 FORWARD CHARACTERISTICS

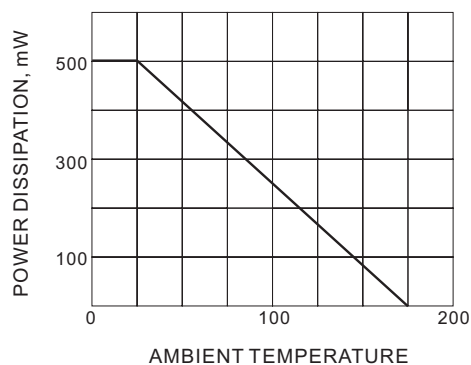


Fig.4 DERATING CURVE

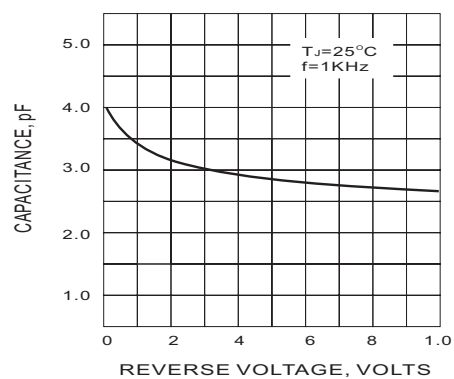


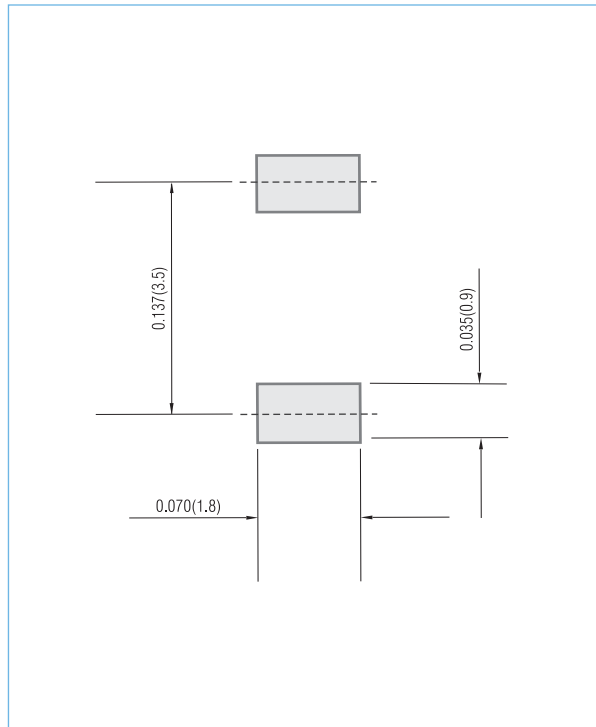
Fig.5 TYPICAL JUNCTION CAPACITANCE

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MOUNTING PAD LAYOUT

MINI-MELF

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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For example :

RB500V-40_R2_00001



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
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

Part No_packing code_Version

LL4148_R1_10001

LL4148_R2_10001

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