



DESCRIPTION

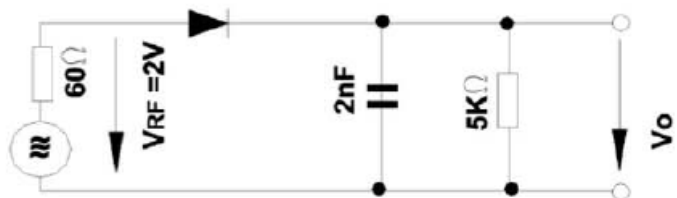
The L4148 is available in LL-34 Package

FEATURES

- For automatic surface mounting
- Available in LL-34 Package

ORDERING INFORMATION

Package Type	Part Number
LL-34	L4148
Note	2,500pcs/Reel
AiT provides all RoHS Compliant Products	



Rectification Efficiency Measurement Circuit



ABSOLUTE MAXIMUM RATINGS

T_A = 25°C

V _{RM} , Peak Reverse Voltage	100V
V _R , Reverse Voltage	75V
I _{F(AV)} , Average Rectified Forward Current	200mA
I _{FSM} , Non-Repetitive Peak Forward Surge Current	at t=1s 0.5A at t=1ms 1.0A at t=1μs 4.0A
P _{TOT} , Power Dissipation	500mW
T _J , Junction Temperature	175°C
T _{STG} , Storage Temperature Range	-65°C ~ +175°C
Valid Provided that Electrodes are kept at ambient temperature	

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A = 25 °C

Parameter	Symbol	Conditions	Min.	Max.	Unit
Forward Voltage	V _F	I _F =10mA	-	1	V
Leakage Current	I _R	V _R =20V	-	25	nA
		V _R =75V		5	μA
		V _R =20V, T _J =150°C		50	μA
Reverse Breakdown Voltage tested with 100uA Pulses	V _{(BR)R}		100	-	V
Capacitance	C _{TOT}	V _R =0V, f=1MHZ	-	4	pF
Voltage Rise when Switching on tested with 50mA Forward Pulses	V _{FR}	t _p = 0.1s, Rise Time<30ns, f _p =5 to 100KHz	-	2.5	V
Reverse Recovery Time	t _{rr}	I _F = 10mA to I _R =1mA V _R =6V, R _L =100Ω	-	4	nS
Thermal Resistance Junction to Ambient Air	R _{thA}			0.35 NOTE1	K/mW
Rectification Efficiency	η _V	F=100MHZ, V _{RF} =2V	0.45	-	-

NOTE1: Valid provided that Electrodes are kept at ambient temperature

TYPICAL CHARACTERISTICS

Figure 1. Forward characteristics

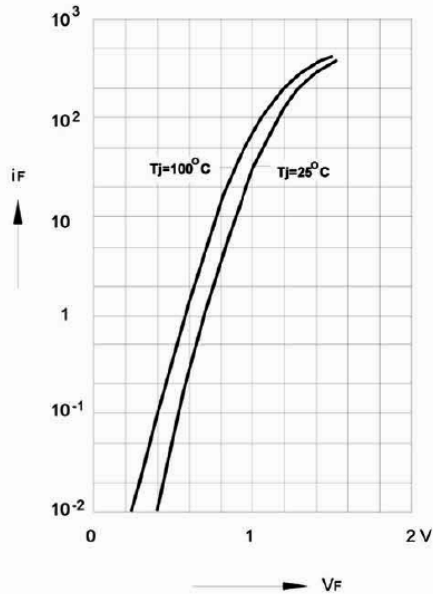


Figure 2. Dynamic forward resistance vs. forward current

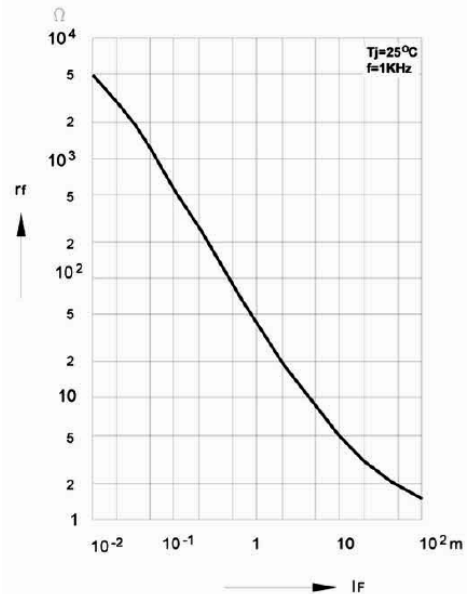


Figure 3. Admissible power dissipation vs. ambient temperature
Valid provided that electrodes are kept at ambient temperature

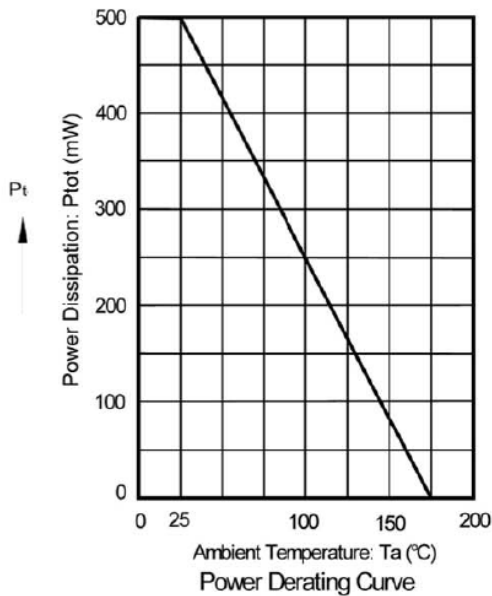


Figure 4. Relative capacitance vs. reverse voltage

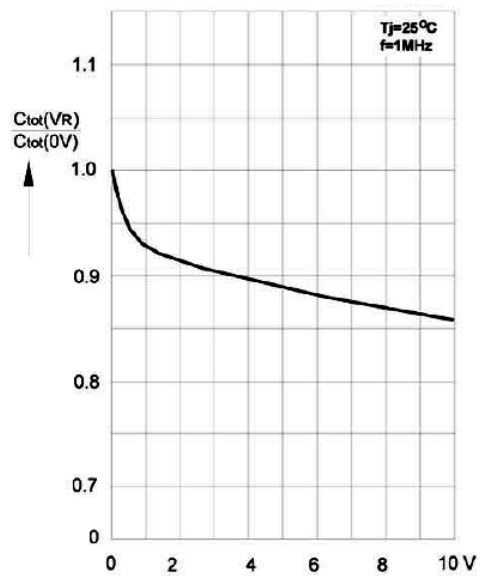


Figure 5. Leakage current vs. junction temperature

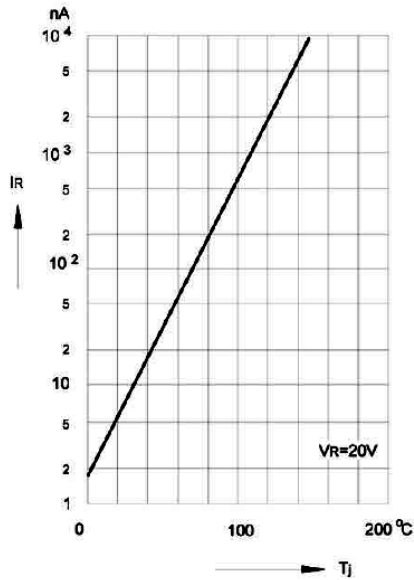
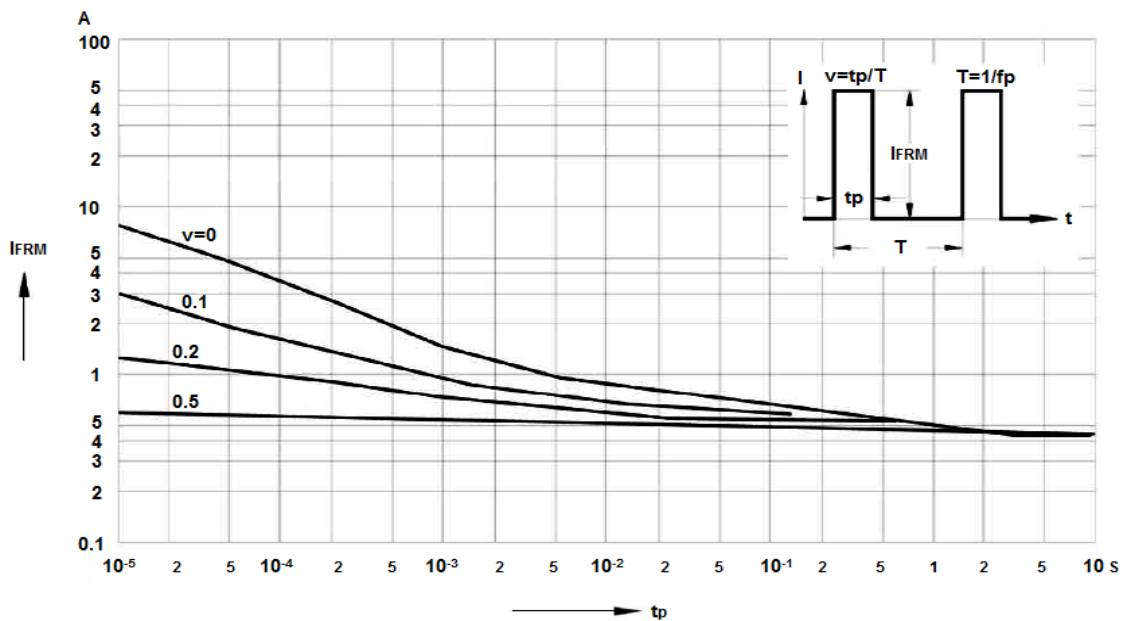


Figure 6. Admissible repetitive peak forward current vs. pulse duration
Valid provided that electrodes are kept at ambient temperature

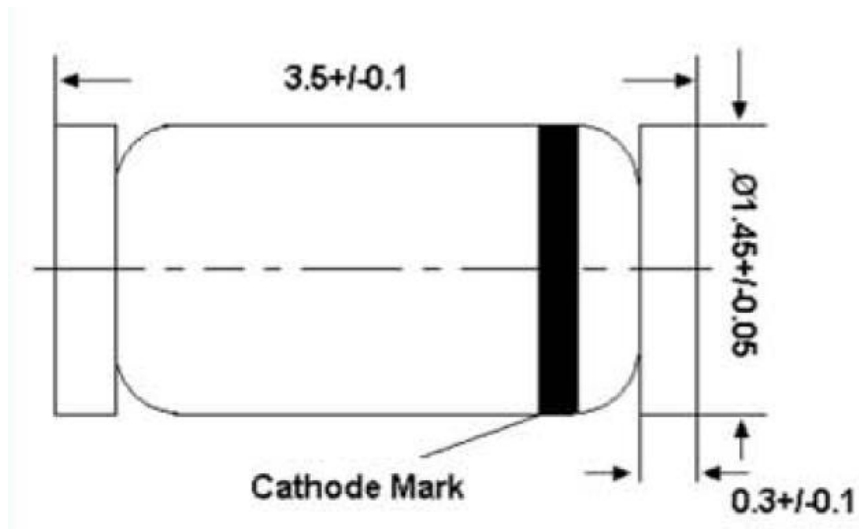




PACKAGE INFORMATION

Dimension in LL-34 Package (Unit: mm)

Glass Case MiniMELF





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