

LL4933G - LL4937G

1.0AMP Surface Mount
Glass Passivated Silicon Rectifiers

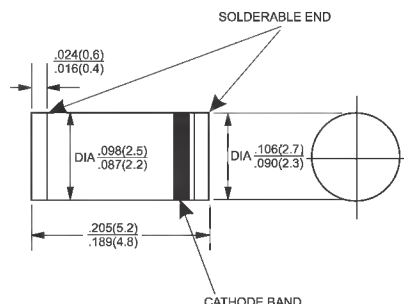
MELF

Features

- ✦ Plastic package has carries underwriters laboratory flammability classification 94V-0.
- ✦ Surge overload rating to 30 amperes peak
- ✦ Ideal for printed circuit board
- ✦ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ✦ High temperature soldering guaranteed: 260°C / 10 seconds at terminals.

Mechanical Data

- ✦ Solderability per MIL-STD-750, method 208 at terminals.
- ✦ Mounting position: Any
- ✦ Weight: 0.12 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	LL 4933G	LL 4934G	LL 4935G	LL 4936G	LL 4937G	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Rectified Current @T _A = 75 °C	I(AV)	1.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	30					A
Maximum Instantaneous Forward Voltage @1.0A	V _F	1.2					V
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =125 °C	I _R	5 100					uA uA
Maximum Reverse Recovery Time(Note 3)	T _{rr}	150					nS
Typical Junction Capacitance (Note 1)	C _j	15					pF
Typical Thermal Resistance (Note 2)	R _{θJC}	60					°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	- 65 to + 150					°C

Notes:

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to case. Mount on 0.2" x 0.2" Cu-pad on P.C.B.
3. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

RATINGS AND CHARACTERISTIC CURVES (LL4933G THRU LL4937G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

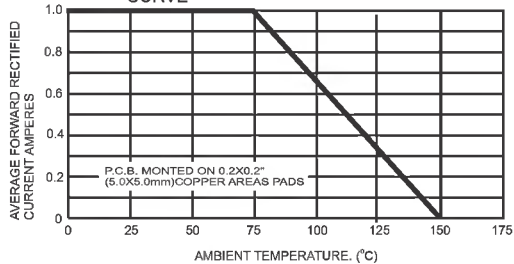


FIG.2- TYPICAL FORWARD CHARACTERISTICS

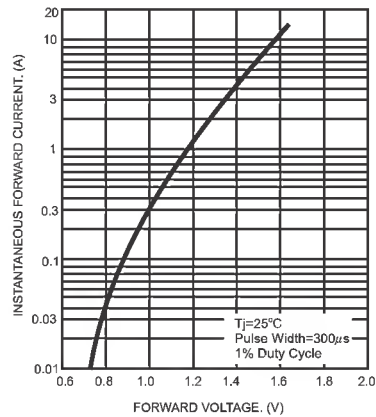


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

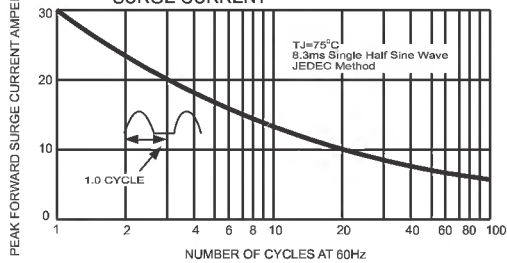


FIG.5- TYPICAL REVERSE CHARACTERISTICS

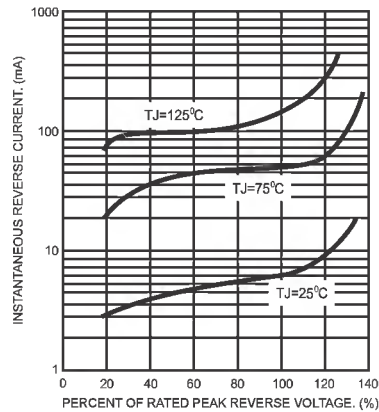


FIG.4- TYPICAL JUNCTION CAPACITANCE

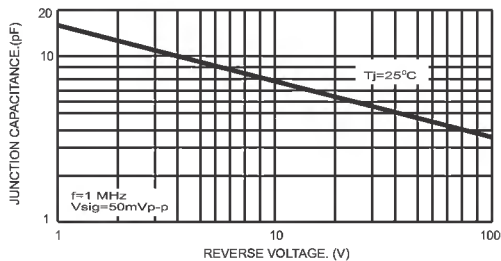
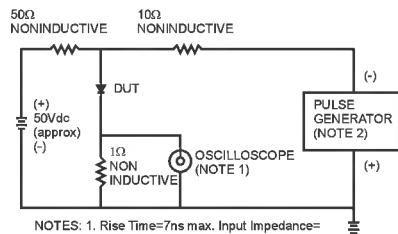


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=1 megohm 22pf
2. Rise Time=10ns max. Source Impedance=50 ohms

