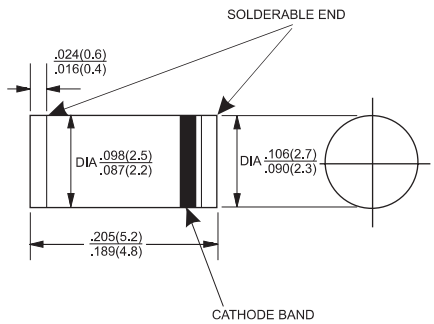
LL4933G THRU LL4937G

1.0 AMP Surface Mount Glass Passivated Silicon Rectifiers

Voltage Range
50 to 600 Volts
Current
1.0 Ampere

MELF



Dimensions in inches and (millimeters)

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

Maximum Ratings and Electrical Characteristics

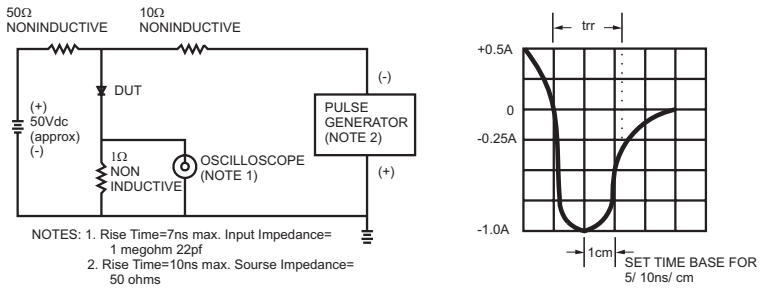
Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	LL 4933G	LL 4934G	LL 4935G	LL 4936G	LL 4937G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current @T_A = 75℃	$I_{(AV)}$	1.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30					A
Maximum Instantaneous Forward Voltage @1.0A	V_F	1.2					V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=100℃	I_R	5 100					uA uA
Maximum Reverse Recovery Time(Note 3)	Trr	150					nS
Typical Junction Capacitance (Note 1)	Cj	15					pF
Typical Thermal Resistance (Note 2)	$R\theta_{JC}$	60					℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	- 65 to + 150					℃

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- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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

FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

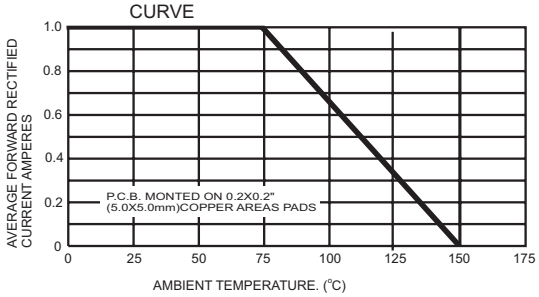


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

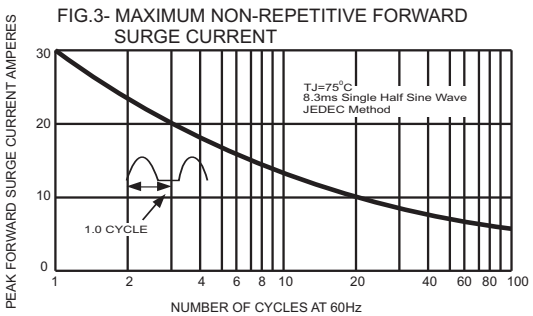


FIG.4- TYPICAL JUNCTION CAPACITANCE

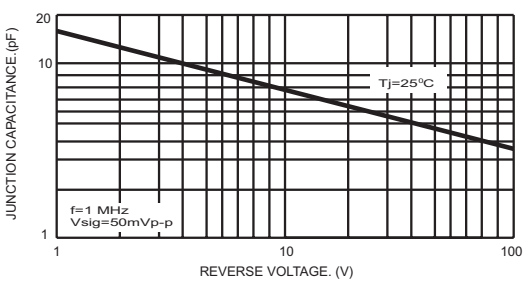


FIG.5- TYPICAL FORWARD CHARACTERISTICS

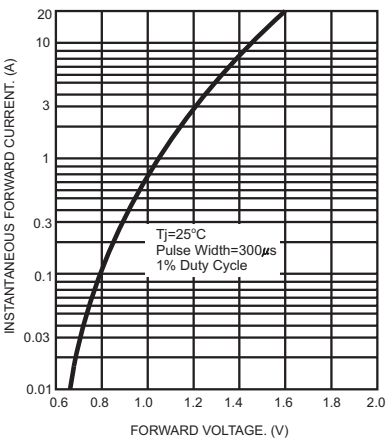


FIG.6- TYPICAL REVERSE CHARACTERISTICS