



# LL4933G THRU LL4937G

1.0 AMP Surface Mount Glass Passivated Silicon Rectifiers



Voltage Range  
50 to 600 Volts  
Current  
1.0 Ampere

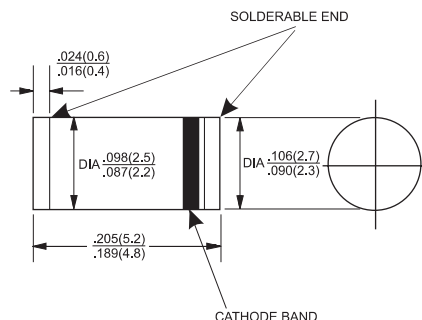
## Features

- ✧ 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

## MELF



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	$V_{RRM}$	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 @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	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 @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	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)	$R_{\theta JC}$	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- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

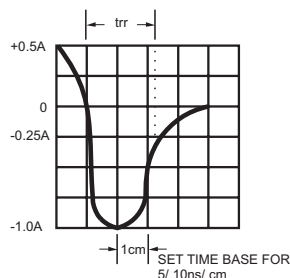
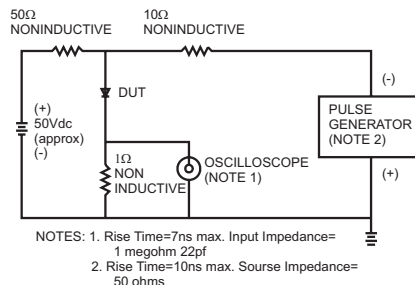


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

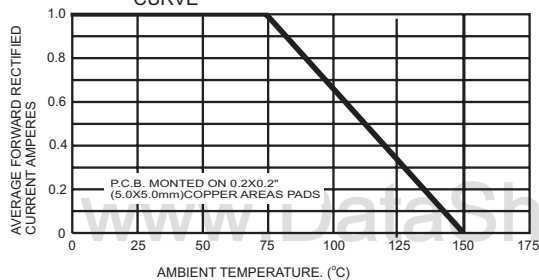


FIG.5- TYPICAL FORWARD CHARACTERISTICS

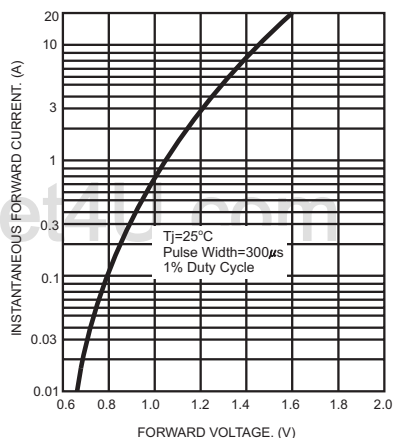


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

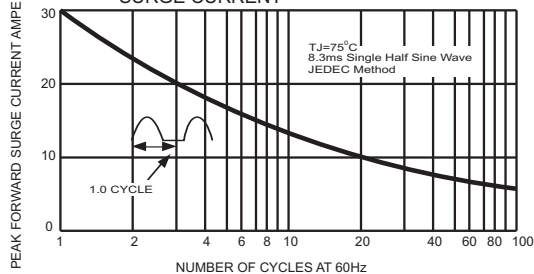


FIG.6- TYPICAL REVERSE CHARACTERISTICS

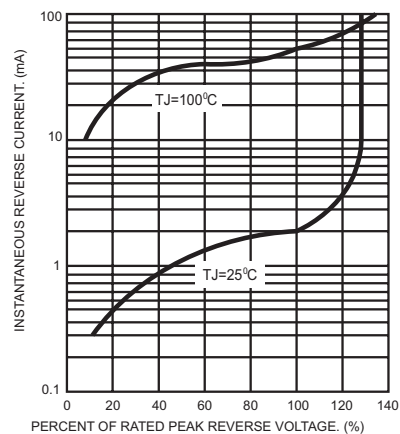


FIG.4- TYPICAL JUNCTION CAPACITANCE

