

Small Signal Product

Surface Mount Glass Passivated Silicon Rectifiers

FEATURES

- Plastic package has carries underwriters
- Ideal for automated placement
- Surge overload rating to 30 Amperes peak
- Reliable low cost construction utilizing molded plastic technique results in in-expensive product
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



MELF



MECHANICAL DATA

Case: MELF

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - green compound (halogen-free)

Mounting position: Any

Weight: 0.12 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	LL40 01G	LL40 02G	LL40 03G	LL40 04G	LL40 05G	LL40 06G	LL40 07G	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	1							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F	1.1							V
Maximum reverse current @ rated VR T _J =25 °C T _J =125 °C	I _R	5 100							μA
Typical junction capacitance (Note 2)	C _j	15							pF
Typical thermal resistance	R _{θJC}	50							°C/W
Operating junction temperature range	T _J	- 65 to +150							°C
Storage temperature range	T _{STG}	- 65 to +150							°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

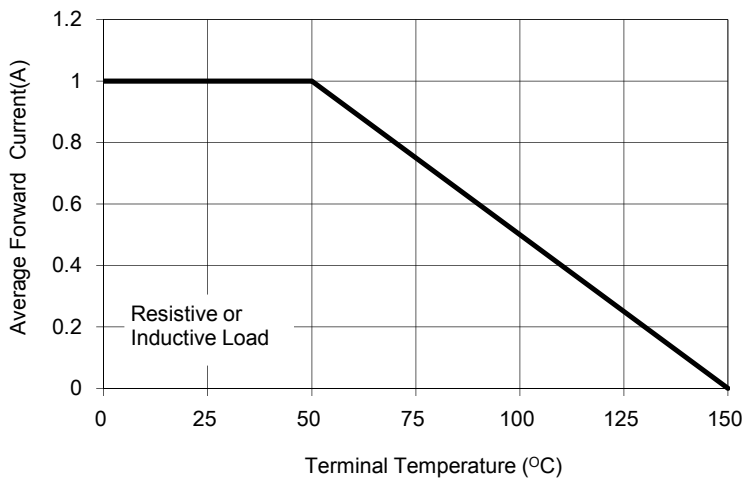


Fig. 2 Maximum Non-Repetitive Peak Forward Surge Current

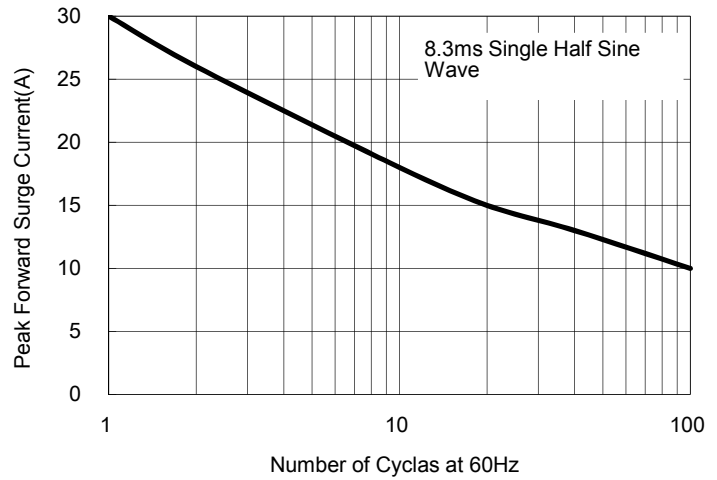


Fig. 3 Instantaneous Forward Characteristics

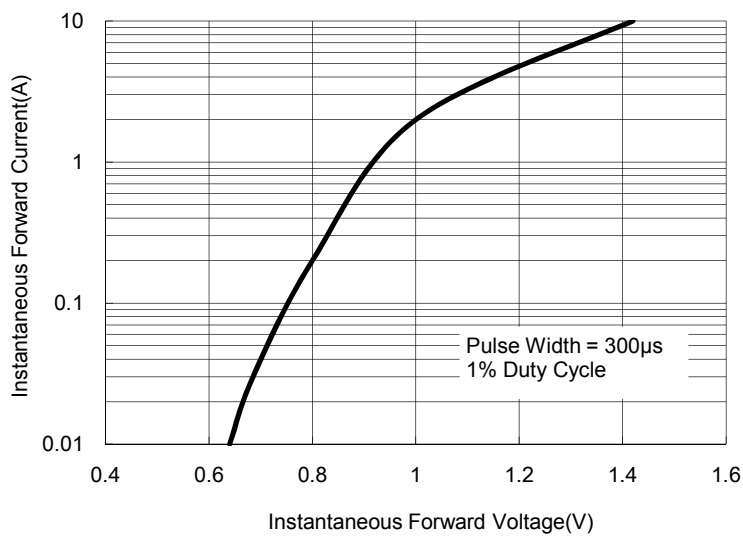


Fig. 4 Typical Reverse Characteristics

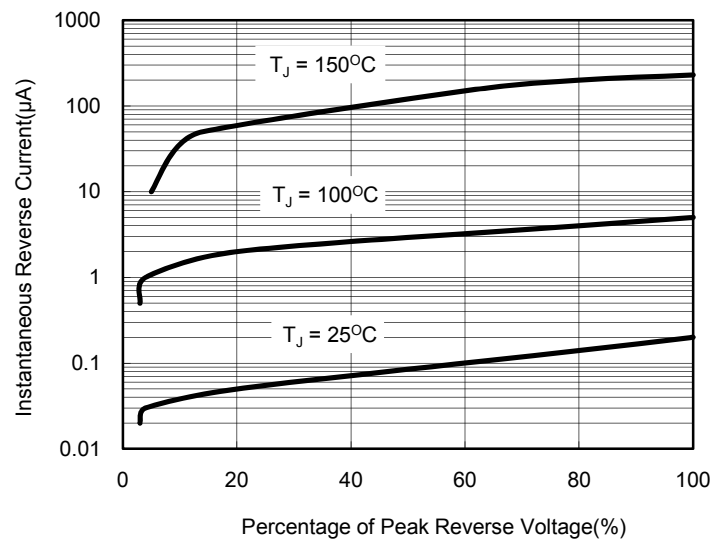


Fig. 5 Typical Junction Capacitance

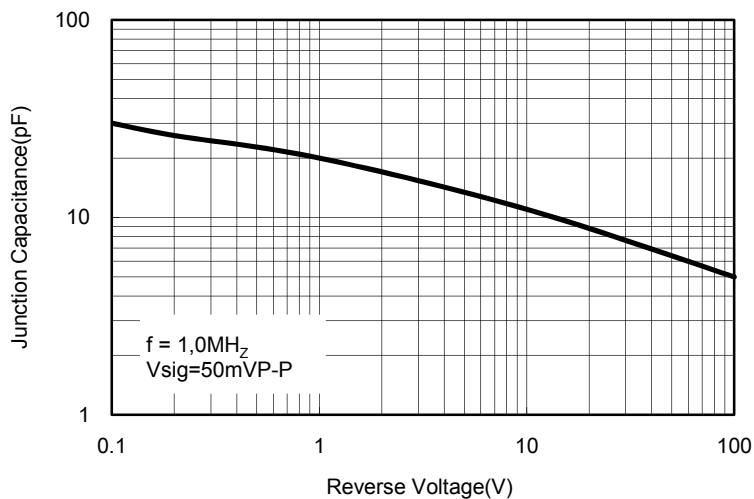
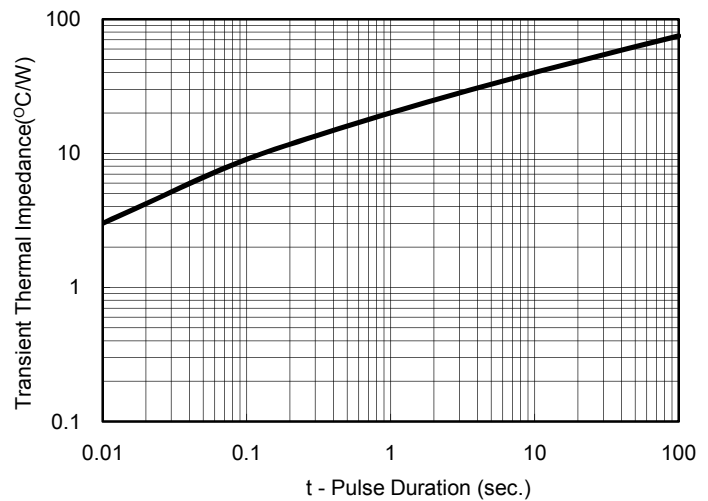


Fig. 6 Typical Transient Thermal Impedance



Small Signal Product

ORDERING INFORMATION					
PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
LL400xG (Note 1)	(Note 2)	L0	G	MELF	5K / 13" Reel

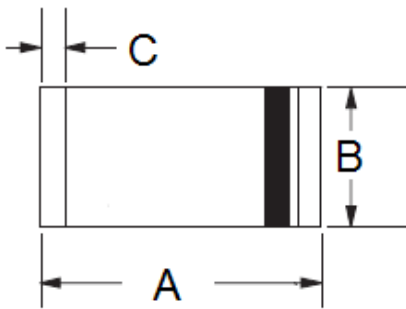
Note 1: "x" defines voltage from 50V (LL4001G) to 1000V (LL4007G)

Note 2: Indicator of manufacturing site for manufacture special control, if empty means no special control requirement

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
LL4007G L0	LL4007G		L0		
LL4007G-J0 L0G	LL4007G	J0	L0	G	Green compound

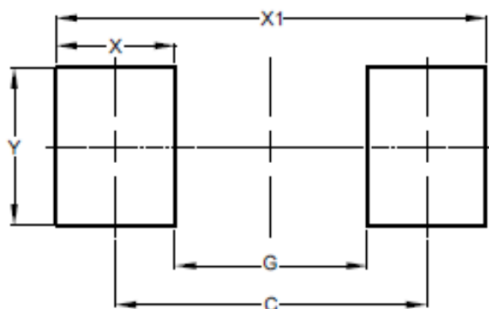
PACKAGE OUTLINE DIMENSIONS

MELF



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	4.80	5.50	0.189	0.217
B	2.25	2.67	0.089	0.105
C	0.30	0.60	0.012	0.024

SUGGEST PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
C	4.80	0.189
G	3.30	0.130
X	1.50	0.059
X1	6.30	0.248
Y	2.70	0.106

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Diodes - General Purpose, Power, Switching category:](#)

Click to view products by [Taiwan Semiconductor manufacturer:](#)

Other Similar products are found below :

[053684A](#) [057245E](#) [10A06-TP](#) [10A10](#) [10A10](#) [10A10](#) [10A10G](#) [10A2](#) [10A4](#) [150K20A](#) [150K60A](#) [150K80A](#) [150KR80A](#) [1A1](#) [1A2](#) [1A3](#) [1A4](#)
[1A4](#) [1A5](#) [1A6](#) [1A7](#) [1A7](#) [1A7](#) [1A7](#) [1A7A](#) [1G7](#) [1N3064TR](#) [1N3070](#) [1N3070TR](#) [1N3295A](#) [1N3295AR](#) [1N3296A](#) [1N3493R-SGS](#) [1N3595](#)
[1N3595TR](#) [1N3595US](#) [1N3600](#) [1N3600 TR](#) [1N4001](#) [1N4001](#) [1N4001](#) [1N4001](#) [1N4001](#) [1N4001](#) [1N4001](#) [1N4001](#) [1N4001A](#) [1N4001G](#) [1N4001G](#)
[1N4001-T](#) [1N4001W](#)