

- 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 ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LL40 01G	LL40 02G	LL40 03G	LL40 04G	LL40 05G	L 0
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	
Maximum average forward rectified current	$I_{F(AV)}$	1					
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	30					
Maximum instantaneous forward voltage (Note 1) @ 1 A	V_F	1.1					
Maximum reverse current @ rated VR $T_J=25^{\circ}\text{C}$ $T_J=125^{\circ}\text{C}$	I_R	5 100					
Typical junction capacitance (Note 2)	C_j	15					
Typical thermal resistance	$R_{\theta JC}$	50					
Operating junction temperature range	T_J	- 65 to +150					
Storage temperature range	T_{STG}	- 65 to +150					

Note 1: Pulse test with $PW=300\mu\text{s}$, 1% duty cycle

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

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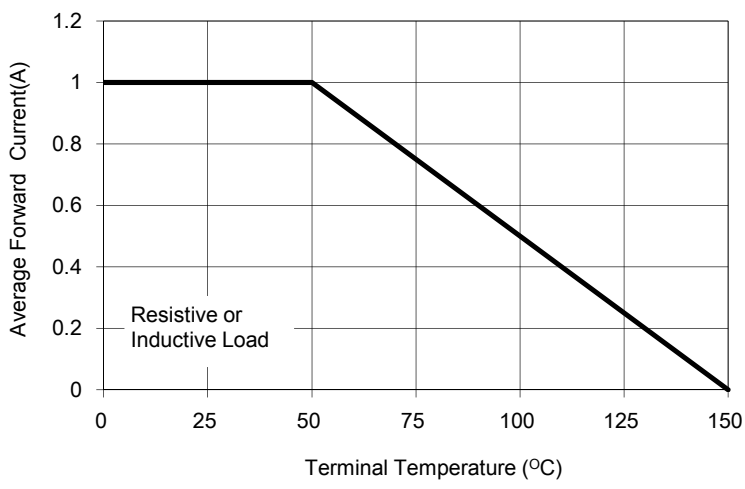


Fig. 3 Instantaneous Forward Characteristics

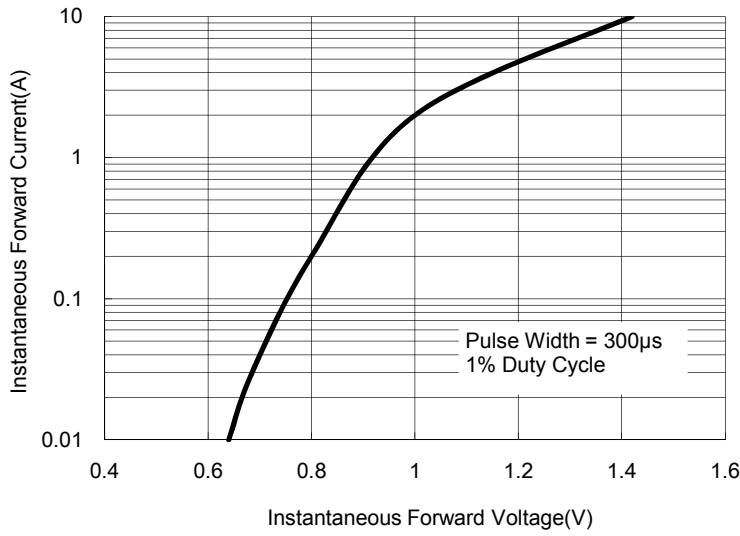


Fig. 5 Typical Junction Capacitance

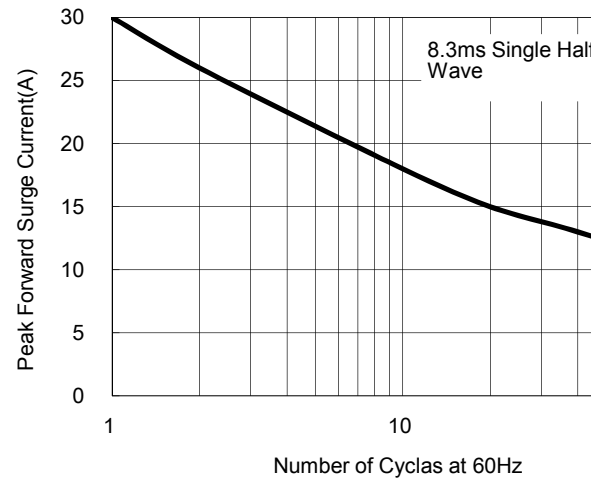
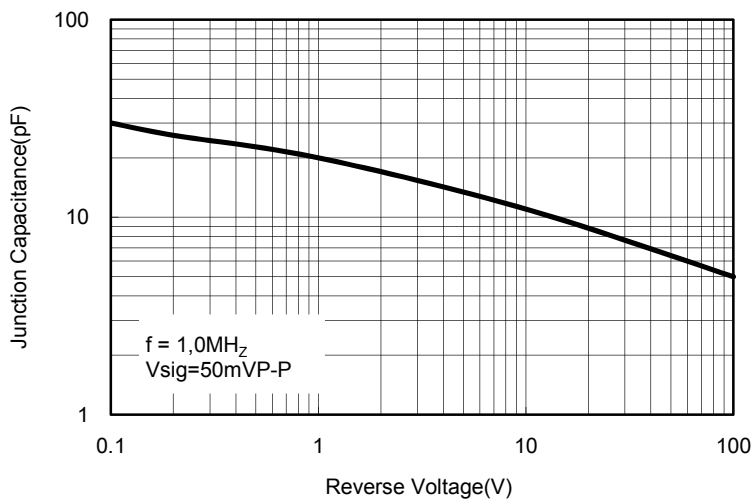


Fig. 4 Typical Reverse Characteristics

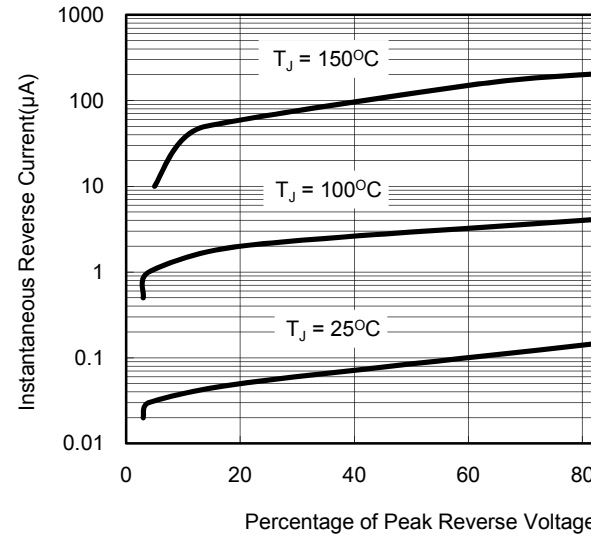
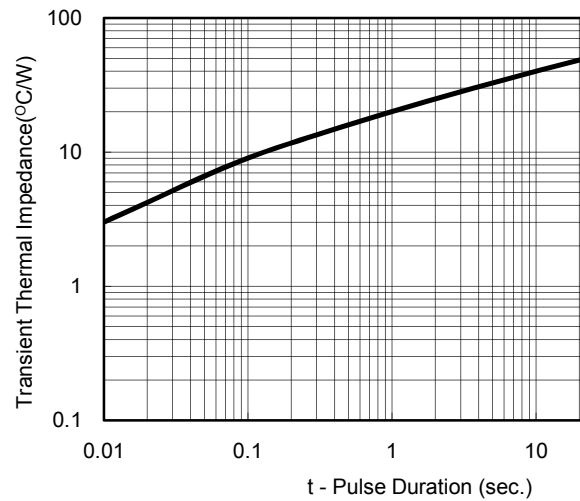


Fig. 6 Typical Transient Thermal Impedance



LL400xG (Note 1)	(Note 2)	L0	G	MELF	5K
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Note 1: "x" defines voltage from 50V (LL4001G) to 1000V (LL4007G)

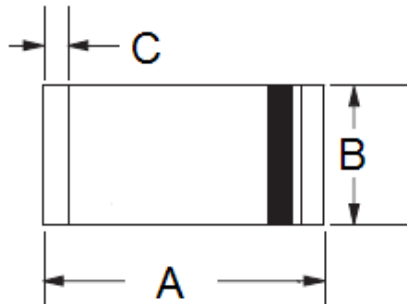
Note 2: Indicator of manufacturing site for manufacture special control, if empty means no special control requirement

EXAMPLE

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

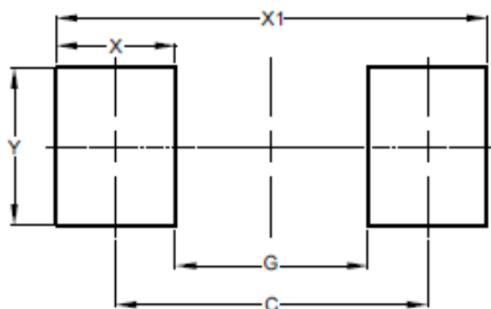
PACKAGE OUTLINE DIMENSIONS

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

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