

1A, 50V - 1000V Surface Mount Glass Plassivated 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







MELF

MECHANICAL DATA

Case: MELF Molding compound, UL flammability classification rating 94V-0 Mounting position: Any Polarity: Indicated by silver cathode band Weight: 0.12 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)										
	SYMBOL	LL40	LL40	LL40	LL40	LL40	LL40	LL40		
		01G	02G	03G	04G	05G	06G	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				А	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}				30				А	
Maximum instantaneous forward voltage (Note 1) @ 1 A	V _F				1.1				V	
Maximum reverse current @ rated V_R T_J=25°C T_J=125°C	I _R				5 100				μA	
Typical junction capacitance (Note 2)	CJ				15				pF	
Typical thermal resistance	R _{θJC}				50				°C/W	
Operating junction temperature range	TJ	- 65 to +150					°C			
Storage temperature range	T _{STG}			-	65 to +15	50			°C	

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

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



RATINGS AND CHARACTERISTICS CURVES

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





Fig. 3 Instantaneous Forward Characteristics







Fig. 4 Typical Reverse Characteristics







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ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKAGE	PACKING	
LL400xG (Note 1)	LO	MELF	5K / 13" Reel	

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

EXAMPLE					
PREFERRED P/N	EFERRED P/N PART NO. PACKING CODE		DESCRIPTION		
LL4007G L0	LL4007G	LO			

PACKAGE OUTLINE DIMENSIONS

MELF



DIM	Unit	(mm)	Unit (inch)			
DIM.	Min	Мах	Min	Мах		
А	4.80	5.50	0.189	0.217		
В	2.25	2.67	0.089	0.105		
С	0.30	0.60	0.012	0.024		

SUGGEST PAD LAYOUT



ым	Unit (mm)	Unit (inch) Typ.		
	Тур.			
С	4.80	0.189		
G	3.30	0.130		
Х	1.50	0.059		
X1	6.30	0.248		
Y	2.70	0.106		



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