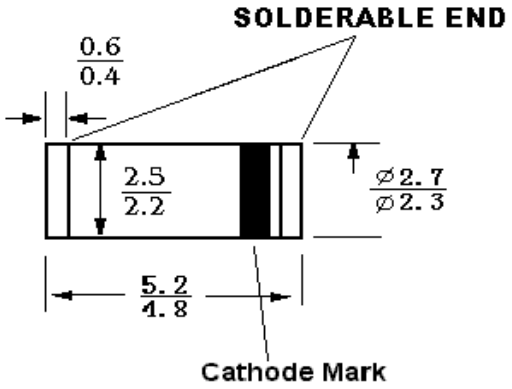
LL4001G THRU LL4007G

1.0 AMP SURFACE MOUNT GLASS PA SSIVATED SILICON RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 1.0 Ampere

LL-41



MELF

Dimensions in mm

Features

- Surge overload rating to 30 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering: 250^{o}C/10 seconds at terminals

Mechanical Data

- Case: SMA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, method 208.
- Polarity: Indicated by cathode band

Absolute Maximum Ratings and Characteristics

Ratings at 25^{0}C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	LL 4001G	LL 4002G	LL 4003G	LL 4004G	LL 4005	LL 4006G	LL 4007G	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T_A = 75 ^{O}C	$I_{(AV)}$	1							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Maximum instantaneous forward voltage at 1A	V_F	1.1							Volts
Maximum DC reverse current T_A = 25 ^{O}C at rated DC blocking voltage T_A = 125 ^{O}C	I_R	5 100							µA
Typical junction capacitance (Note 1)	C_J	15							pF
Maximum thermal resistance (Note 2)	$R_{\theta JL}$	50							^{O}C/W
Operating and storage temperature range	T_J, T_S	-65 to + 150							^{O}C

Notes: (1) Measured at 1MHz and applied reverse voltage of 4 volts D.C
(2) Thermal resistance from junction to ambient

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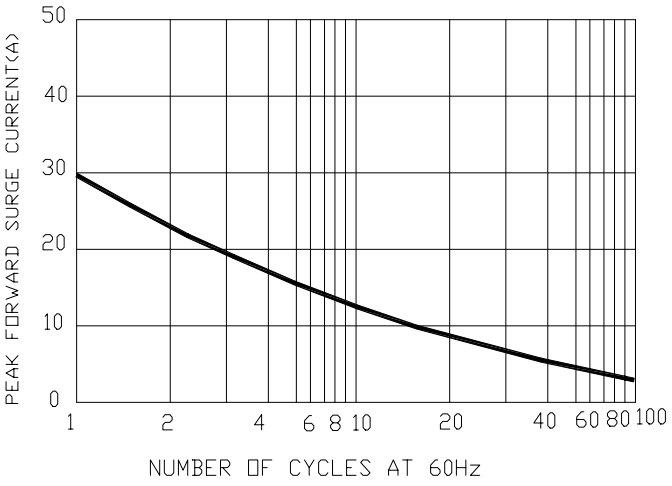
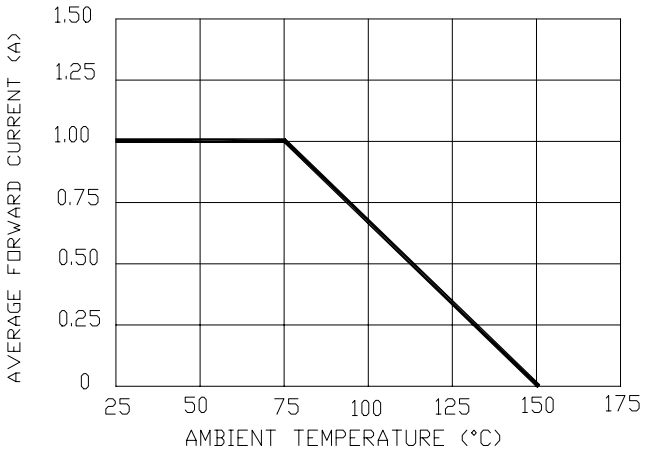
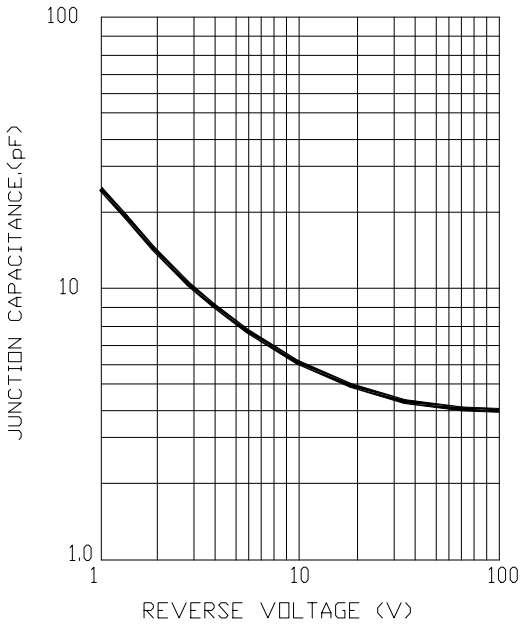
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



MAXIMUM FORWARD CURRENT DERATING CURVE



TYPICAL JUNCTION CAPACITANCE



TYPICAL FORWARD CHARACTERISTICS