

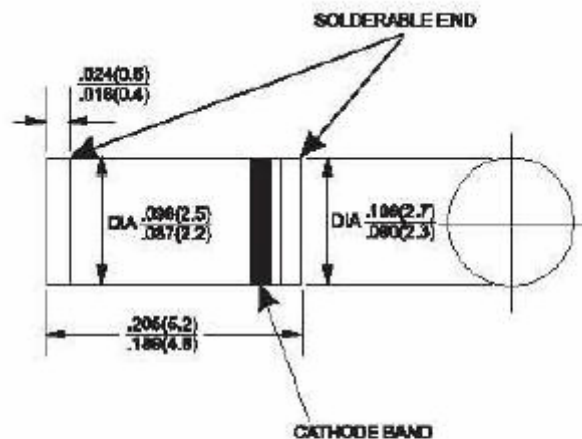


LL4001 THRU LL4007

1.0 AMP. SILICON RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
1.0 Amperes

MELF



Dimensions in inches and (millimeters)

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- 3mm miniature body

Mechanical Data

- Cases: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed; 260°C / 10 seconds / .375" (9.5mm) lead lengths at 5 lbs. (2.3kg) tension
- Weight: 0.12 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number		LL 4001	LL 4002	LL 4003	LL 4004	LL 4005	LL 4006	LL 4007	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm) Lead length @ TA=75°C	IF(AV)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	VF	1.1							V
Maximum DC Reverse Current @ TA=25°C at rated DC blocking voltage @ TA=125°C	IR	5.0 100							μ A μ A
Maximum Full Load Reverse Current, Full Cycle Average .375" (9.5mm) Lead Length @ TI=50°C	IR	30							μ A
Typical Junction Capacitance (Note 1)	CJ	15							pF
Typical Thermal Resistance (Note 2)	R*JA	50							°C /W
Operating and storage Temperature Range	TJ, TSTG	-65 to +150							°C

- NOTES:**
1. Measure at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
 2. Thermal Resistance from Junction Ambient .375" (9.5mm) Lead Length.

RATING AND CHARACTERISTIC CURVES LL4001 THRU LL4007



FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

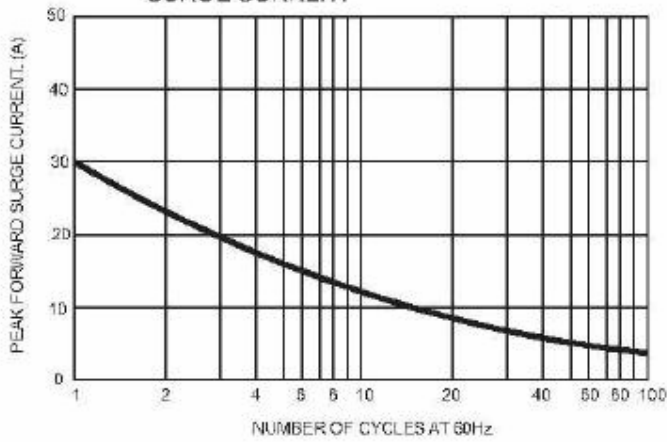


FIG.2- TYPICAL FORWARD CHARACTERISTICS

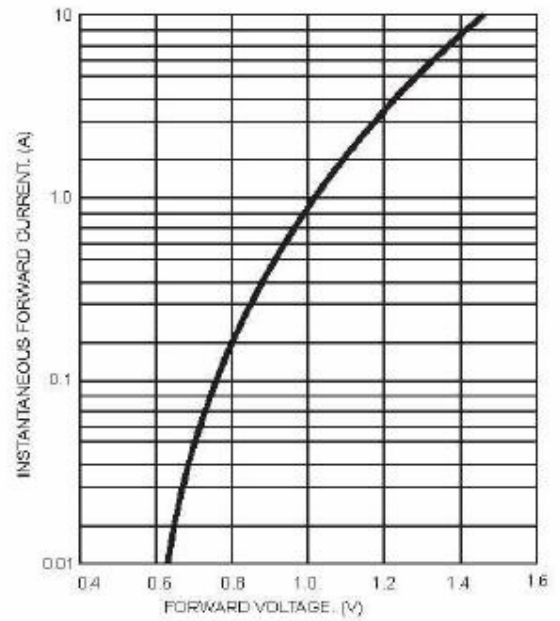


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

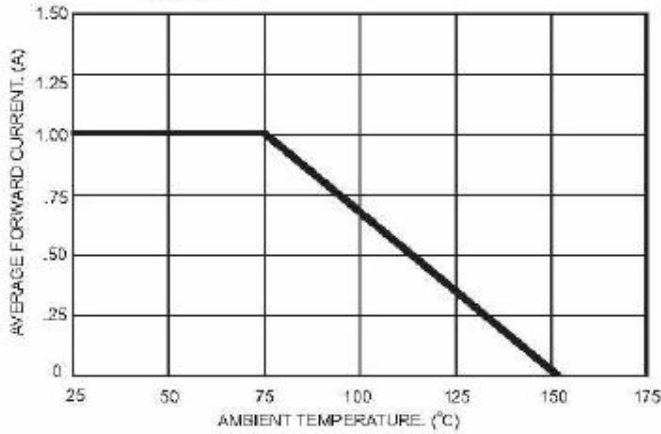


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

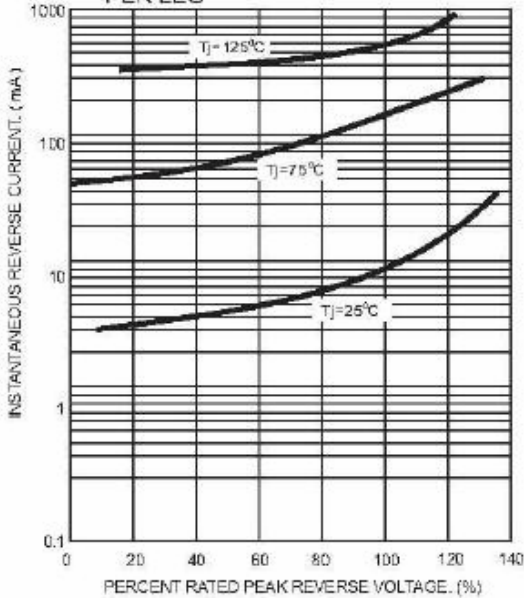


FIG.5- TYPICAL JUNCTION CAPACITANCE

