

LL4001 THRU LL4007

CURRENT 1.0 Ampere
VOLTAGE 50 to 1000 Volts

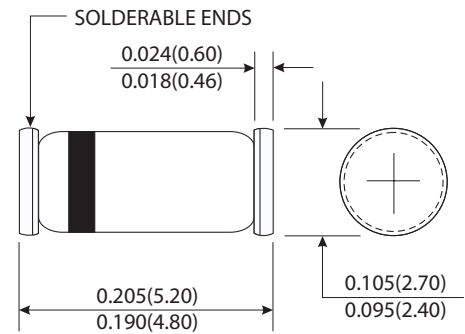
Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Glass passivated junction
- High temperature soldering guaranteed: 250 °C/10 seconds, at terminals

Mechanical Data

- Case : JEDEC MELF(DO-41) molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.0041 ounce, 0.116 gram

MELF (DO-41)



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

		Symbols	LL 4001	LL 4002	LL 4003	LL 4004	LL 4005	LL 4006	LL 4007	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 0.375"(9.5mm) lead length at T _A =75 °C		I _(AV)	1.0							Amp
Peak forward surge current 8.3ms half sine wave superimposed on rated load (JEDEC method)		I _{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A		V _F	1.1							Volts
Maximum reverse current at rated voltage	T _A =25 °C	I _R	5.0							μ A
	T _A =125 °C		50.0							
Typical thermal resistance (Note 2) (Note 3)		R θ _{JA} R θ _{JL}	75.0 30.0							°C/W
Typical junction capacitance (Note 1)		C _J	15.0							pF
Maximum DC blocking voltage temperature		T _A	+150							°C
Operating and storage temperature range		T _J T _{STG}	-65 to +150							°C

Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance from junction to ambient, 0.24 × 0.24"(6.0 × 6.0mm) copper pads to each terminals
- (3) Thermal resistance from junction to terminals, 0.24 × 0.24"(6.0 × 6.0mm) copper pads to each terminals

RATINGS AND CHARACTERISTIC CURVES LL4001 THRU LL4007

FIG.1-FORWARD CURRENT DERATING CURVE

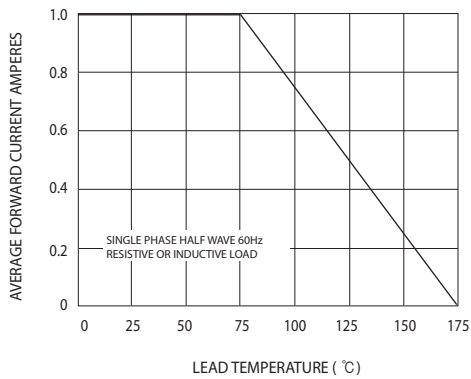


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

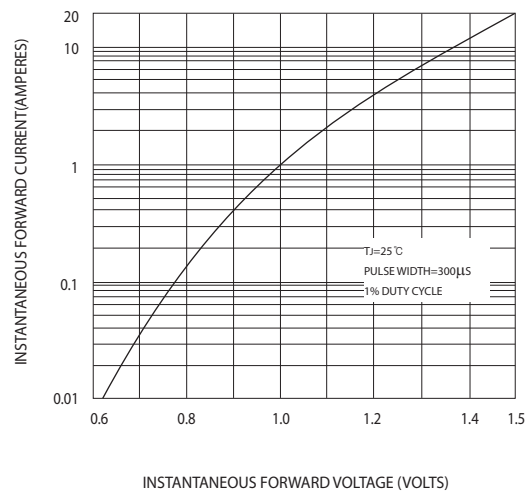


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

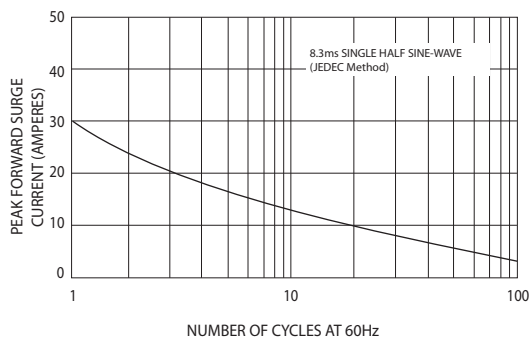


FIG.4-TYPICAL REVERSE CHARACTERISTICS

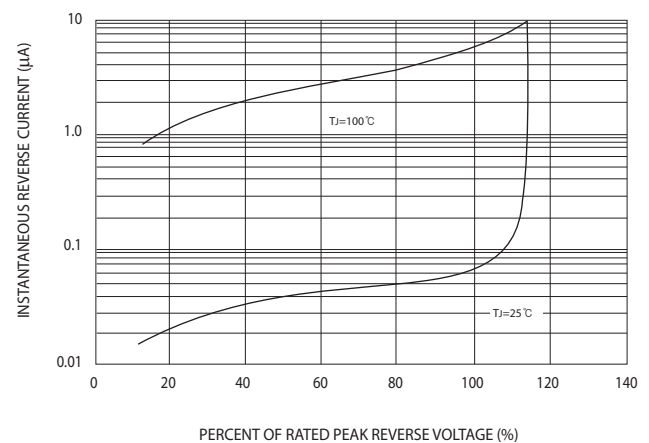


FIG.5-TYPICAL JUNCTION CAPACITANCE

