SAMYANG ELECTRONICS

LL4001G --- LL4007G

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.0 A

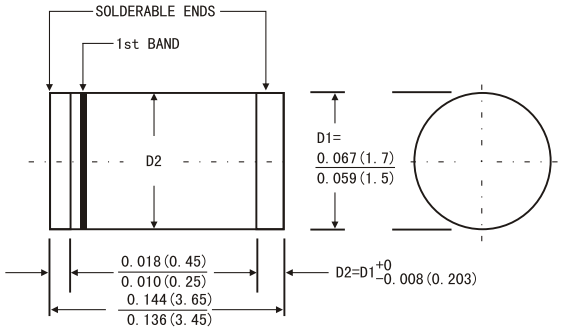
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case*: JEDEC Mini MELF(DO-213AA) molded plastic body
- *Terminals*: Solder Plated, solderable per MIL-STD-750,method 2026
- *Polarity*: Color band denotes cathode end
- *Mounting Position*: Any
- *Weight*: 0.0005ounce, 0.015 gram

MiniMELF(DO-213AA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

	Symbols	LL 4001G	LL 4002G	LL 4003G	LL 4004G	LL 4005G	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 0.375"(9.5mm) lead length at T_A=75℃	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) T_A=75℃	I_{FSM}	25.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.1							Volts
Maximum Reverse current at rated DC Blocking Voltage T_A =25℃	I_R	5.0							μA
Maximum Reverse current at rated DC Blocking Voltage T_A =125℃		50.0							
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	75							℃/W
Typical Thermal resistance (Note 3)	$R_{\theta JL}$	30							
Typical Junction Capacitance(Note 1)	C_J	15							PF
Operating and Storage temperature Range	T_J/T_{STG}	-65 to+175							℃

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

FIG.1-FORWARD CURRENT DERATING CURVE

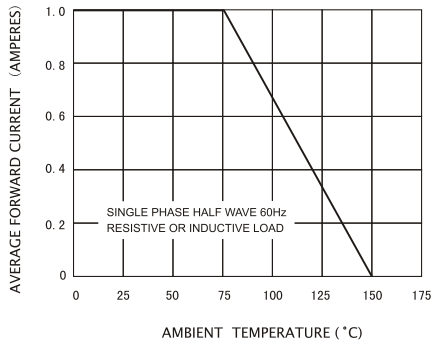


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

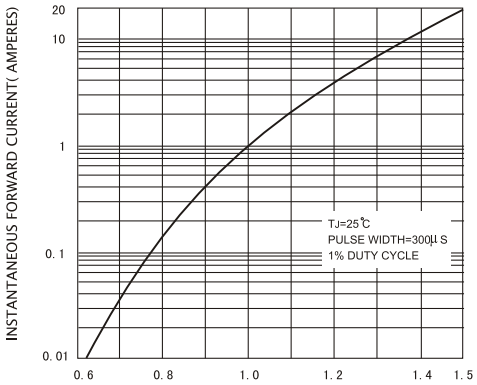


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

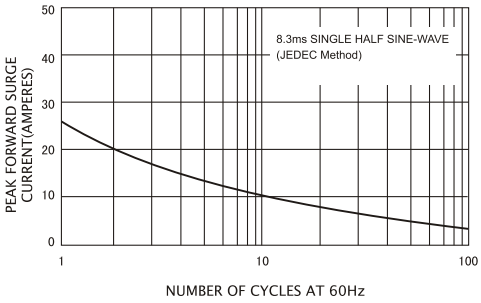


FIG.4-TYPICAL REVERSE CHARACTERISTICS

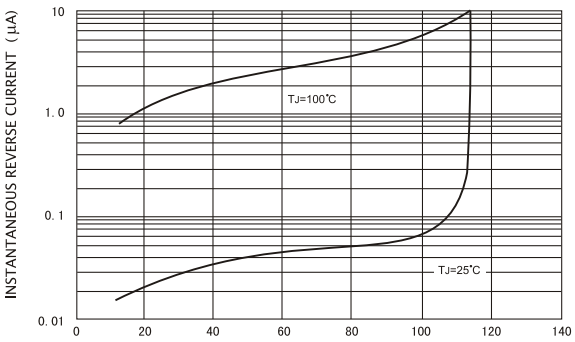


FIG.5-TYPICAL JUNCTION CAPACITANCE

