

RL201G THRU RL207G

GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

FEATURES

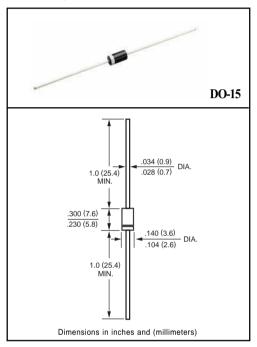
- * High reliability
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.38 gram

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 current by 20%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	RL201G	RL202G	RL203G	RL204G	RL205G	RL206G	RL207G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	lo	2.0						Amps	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	70						Amps	
Typical Junction Capacitance (Note)	Cı	20							pF
Typical Thermal Resistance	RθJA	40						°C/W	
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150							٥C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RL201G	RL202G	RL203G	RL204G	RL205G	RL206G	RL207G	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		VF	1.1							Volts
Maximum DC Reverse Current	@Ta = 25°C		5.0							uAmps
at Rated DC Blocking Voltage	@Ta = 100°C	ln.	50							
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at TL = 75°C		lR	30							uAmps

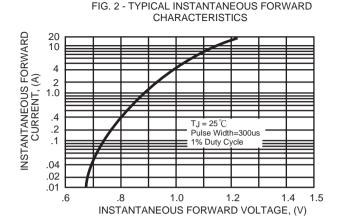
NOTES: Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (RL201G THRU RL207G)

FIG. 1 - TYPICAL FORWARD CURRENT **DERATING CURVE** AVERAGE FORWARD CURRENT, (A) 2.5 2.0 1.5 1.0 Single Phase Half Wave 60Hz .5 Resistive or Inductive Load 0 0 25 50 100 125 150 175 75 AMBIENT TEMPERATURE, (°C)

FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD PEAK FORWARD SURGE CURRENT, (A) SURGE CURRENT 100 8.3ms Single Half Sine-Wave 80 (JEDED Method) 60 40 20 1 2 4 6 8 1 0 20 40 6080100

NUMBER OF CYCLES AT 60Hz



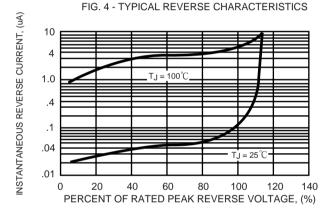


FIG. 5 - TYPICAL JUNCTION CAPACITANCE JUNCTION CAPACITANCE, (pF) 200 100 60 40 20 10 6 4 2 1 .1 .2 .4 1.0 2 4 10 20 40 100 REVERSE VOLTAGE, (V)

