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RL201 THRU RL207

2.0 AMP GENERAL PURPOSE SILICON RECTIFIER - 50V-1000V



FEATURES

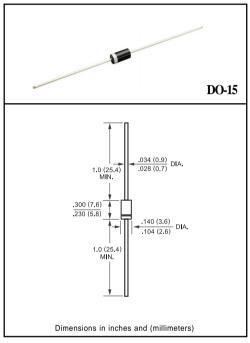
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * RoHS product for packing code suffix "G" Halogen free product for packing code suffix "H"

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any * Weight: 0.4 grams

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	RL201	RL202	RL203	RL204	RL205	RL206	RL207	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	-65 to + 175						٥C	

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

CHARACTERISTICS		SYMBOL	RL201	RL202	RL203	RL204	RL205	RL206	RL207	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					50				uAllips
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at TL = 75°C		IR IR	30						uAmps	

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





AL 2.0 AMP GENERAL PURPOSE SILICON RECTIFIER - 50V-1000V RATING AND CHARACTERISTIC CURVES

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

CHARACTERISTICS 20 10 INSTANTANEOUS FORWARD CURRENT, (A) 4 2 1.0 .4 .2 T.j = 25°C .1 Pulse Width=300 μ s 1% Duty Cycle .04 .02 .01 1.5 .6 .8 1.0 1.2 1.4 INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 2 - TYPICAL INSTANTANEOUS FORWARD

