



# RL201 - RL207

# SILICON RECTIFIER

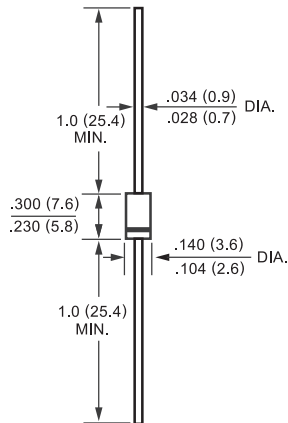
VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 2.0 Amperes

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.38 gram

## FEATURES

- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability



Dimensions in inches and (millimeters)

DO-15



## MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacity load, derate current by 20%

PARAMETER	SYMBOL	RL201	RL202	RL203	RL204	RL205	RL206	RL207	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 at $T_A = 75^\circ\text{C}$	$I_O$	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	70							Amps
Maximum Instantaneous Forward Voltage at 2.0A DC	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$	@ $T_A = 25^\circ\text{C}$	5.0							uAmps
	@ $T_A = 100^\circ\text{C}$	500							
Maximum Full Load Reverse Current Full Cycle Average, .375" (9.5mm) lead length at $T_L = 75^\circ\text{C}$	$I_R$	30							uAmps
Typical Junction Capacitance ( Note )	$C_J$	20							pF
Typical Thermal Resistance	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +175							$^\circ\text{C}$

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



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## RATING AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

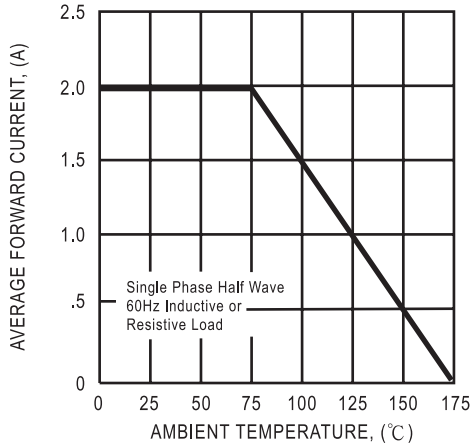


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

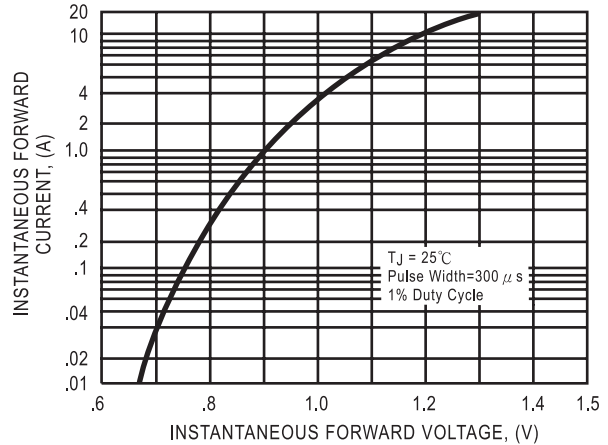


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

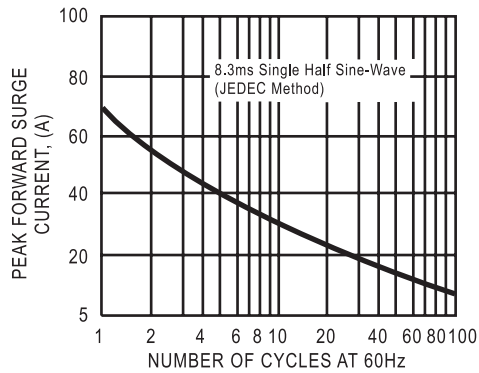


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

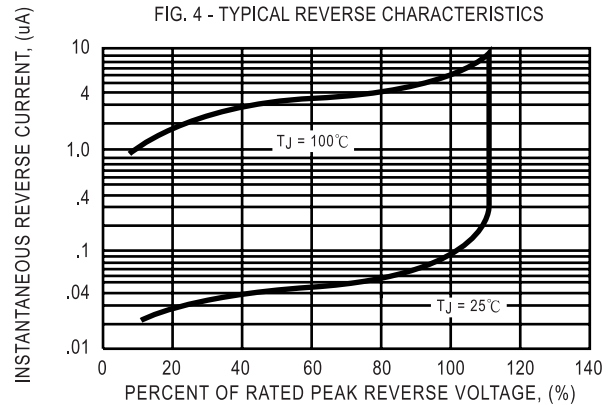


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

