

# RL201 THRU RL207

## GENERAL PURPOSE PLASTIC SILICON RECTIFIER

**REVERSE VOLTAGE:** 50 to 1000 VOLTS

**FORWARD CURRENT:** 2.0 AMPERE

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Suffix "H" indicates Halogen-free parts, ex. RL201H.

### MECHANICAL DATA

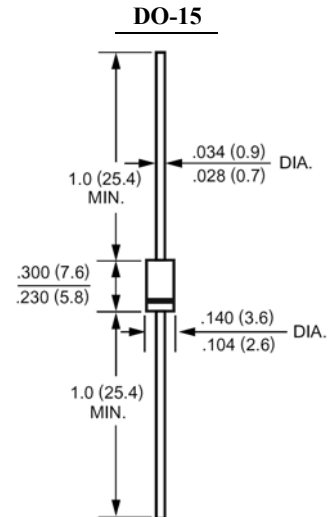
Case : Molded plastic, DO-15

Epoxy : UL 94V-O rate flame retardant

Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Polarity : Color band denotes cathode end

Mounting position : Any



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 current by 20%.

Parameter	Symbols	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 .375"(9.5mm) Lead Length	$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	70.0							Amp
Maximum Forward Voltage at 2.0A DC and 25°C	$V_F$	1.1							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	$I_R$	5.0 50							uAmp
Typical Junction Capacitance (Note 1)	$C_J$	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40.0							°C/W
Operating Junction Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

#### NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.

### RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

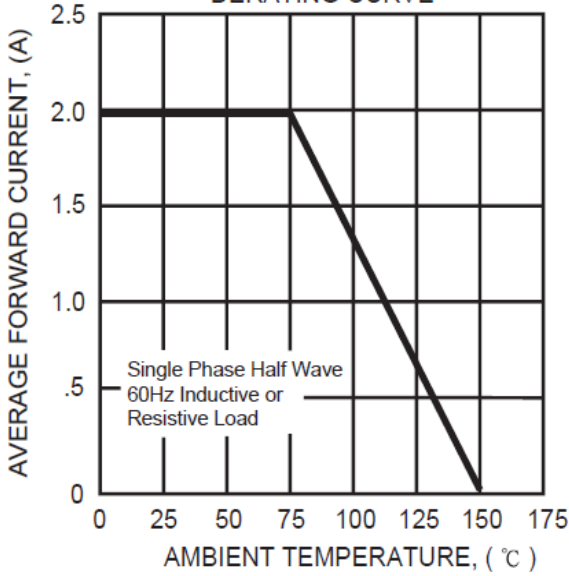


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

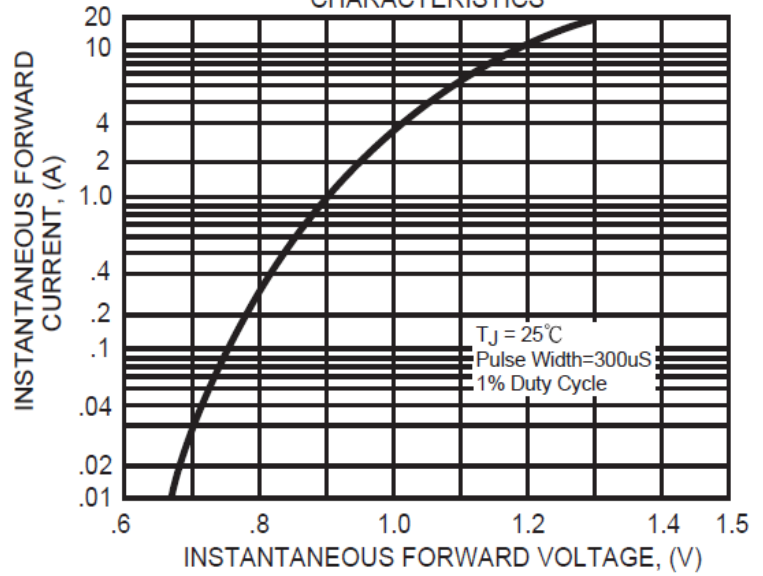


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

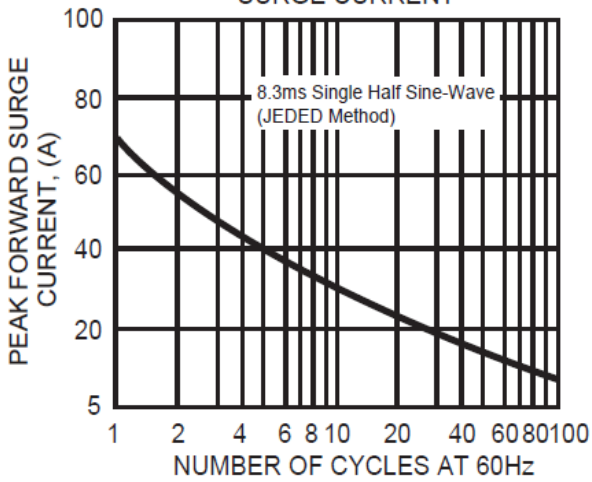


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

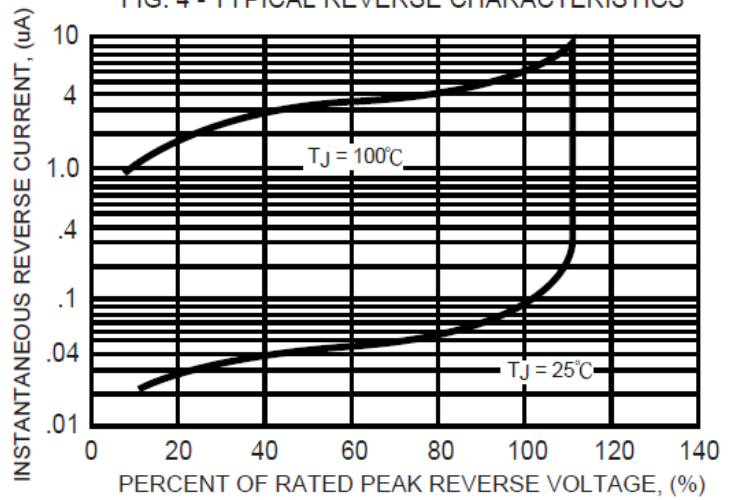


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

