



# RL201G THRU RL207G

## GLASS PASSIVATED JUNCTION RECTIFIER

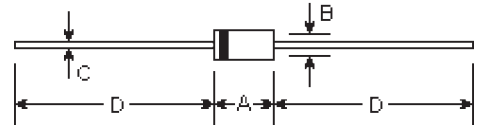
Reverse Voltage - 50 to 1000 Volts

Forward Current - 2.0 Amperes

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame retardant epoxy molding compound
- 2.0 ampere operation at  $T_A=75^\circ\text{C}$  with no thermal runaway
- Glass passivated junction in DO-15 package

### DO-15



### Mechanical Data

- **Case:** Molded plastic, DO-15
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.014 ounce, 0.395 gram

DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.228	0.299	5.8	7.6	
B	0.102	0.142	2.6	3.6	φ
C	0.028	0.034	0.71	0.86	φ
D	1.000	-	25.40	-	

### Maximum Ratings and Electrical Characteristics @25°C unless otherwise specified

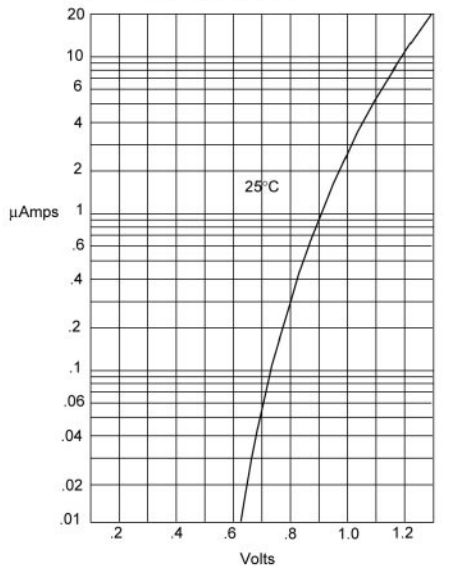
	Symbols	RL 201G	RL 202G	RL 203G	RL 204G	RL 205G	RL 206G	RL 207G	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Average forward current $T_A=75^\circ\text{C}$	$I_{(AV)}$	2.0							Amps
Peak forward surge current 8.3mS half sine-wave	$I_{FSM}$	60.0							Amps
Maximum instantaneous forward voltage $I_F=2.0A; T_A=25^\circ\text{C}$ (Note 1)	$V_F$	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	5.0 50.0							$\mu\text{A}$
Typical junction capacitance Measure at 1.0MHz, $V_R=4.0V$	$C_J$	20							$\mu\text{F}$
Typical thermal resistance	$R_{\theta JA}$	50							$^\circ\text{C/W}$
Operating and storage temperature range	$T_J, T_{STG}$	-65 to +175							$^\circ\text{C}$

Note:

(1) Pulse test: Pulse width 300uSec, Duty cycle 1%

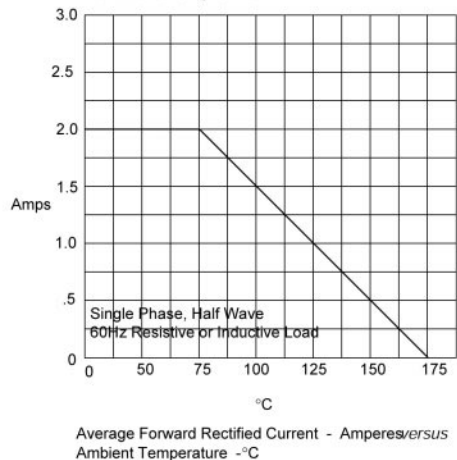
# RATINGS AND CHARACTERISTIC CURVES

Figure 1  
Typical Forward Characteristics



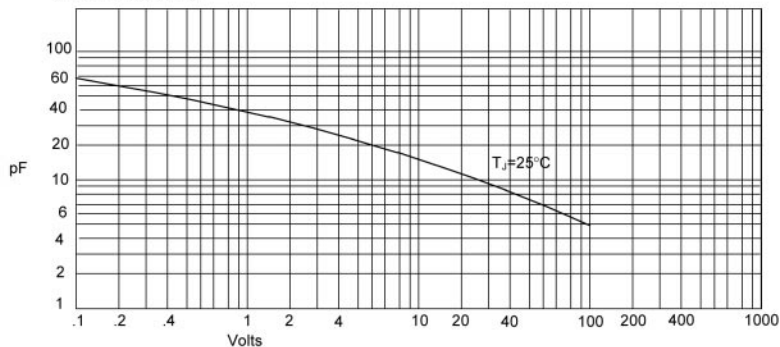
Instantaneous Forward Current - MicroAmperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

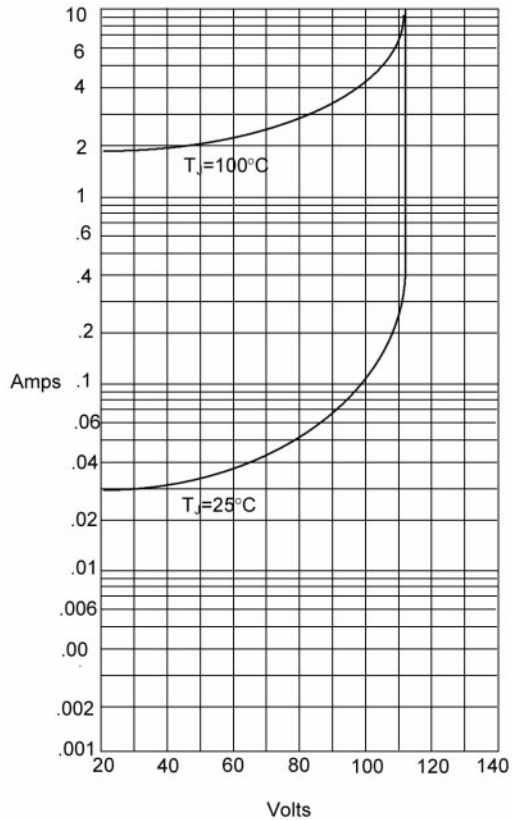
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

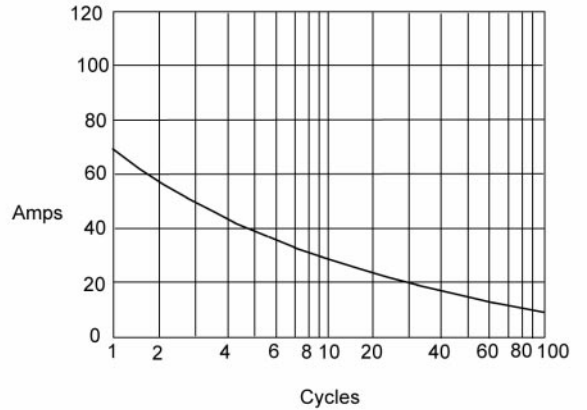
# RATINGS AND CHARACTERISTIC CURVES

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Current - Amperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles