

# RL201 THRU RL207

## Features

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability

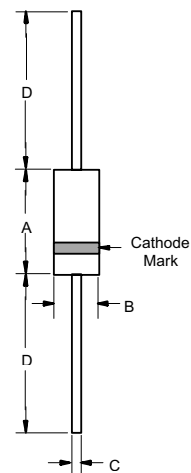
## 2 Amp Silicon Rectifier 50 to 1000 Volts

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance ( $R_{\theta JA}$ ) 40°C/W

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
RL201	---	50V	35V	50V
RL202	---	100V	70V	100V
RL203	---	200V	140V	200V
RL204	---	400V	280V	400V
RL205	---	600V	420V	600V
RL206	---	800V	560V	800V
RL207	---	1000V	700V	1000V

## DO-15



## Electrical Characteristics @ 25°C Unless Otherwise Specified

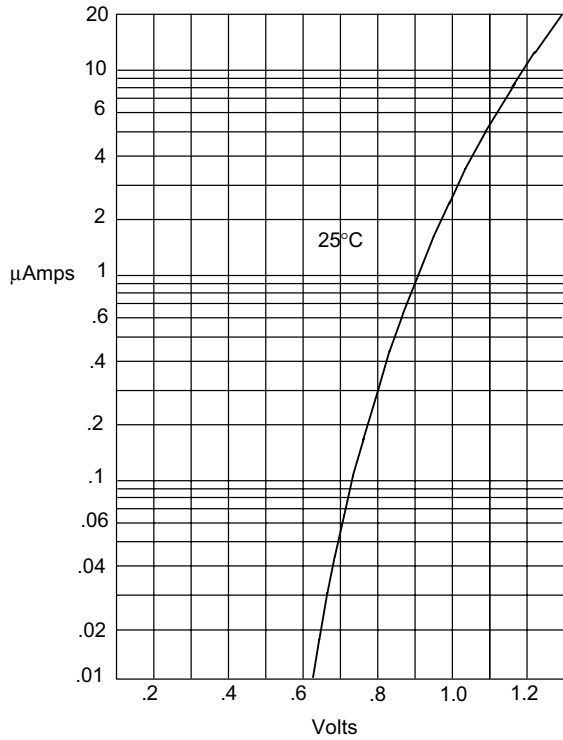
Average Forward Current	$I_{F(AV)}$	2 A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	60A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 2.0\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	20pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

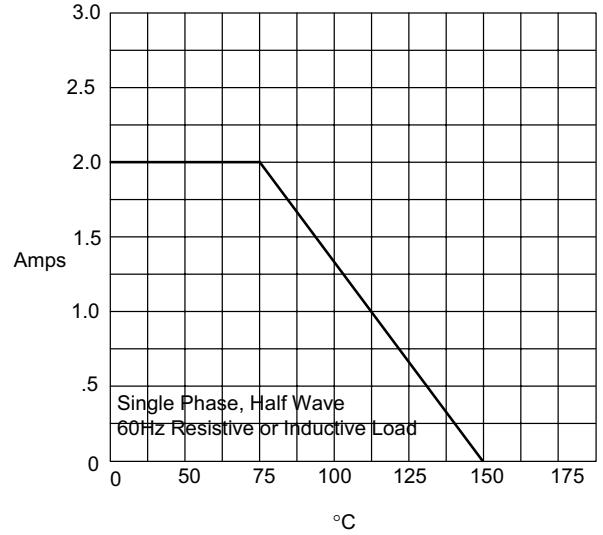
# RL201 thru RL207

Figure 1  
Typical Forward Characteristics



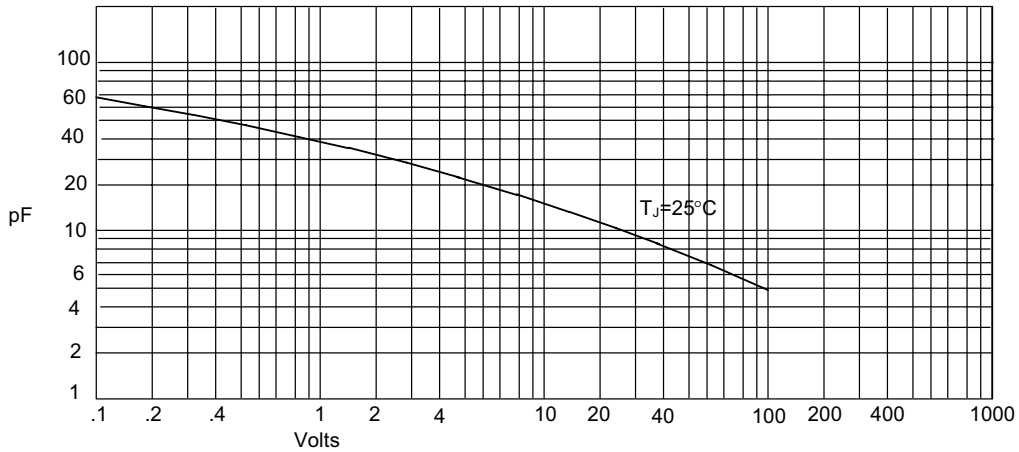
Instantaneous Forward Current - MicroAmperes *versus* Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

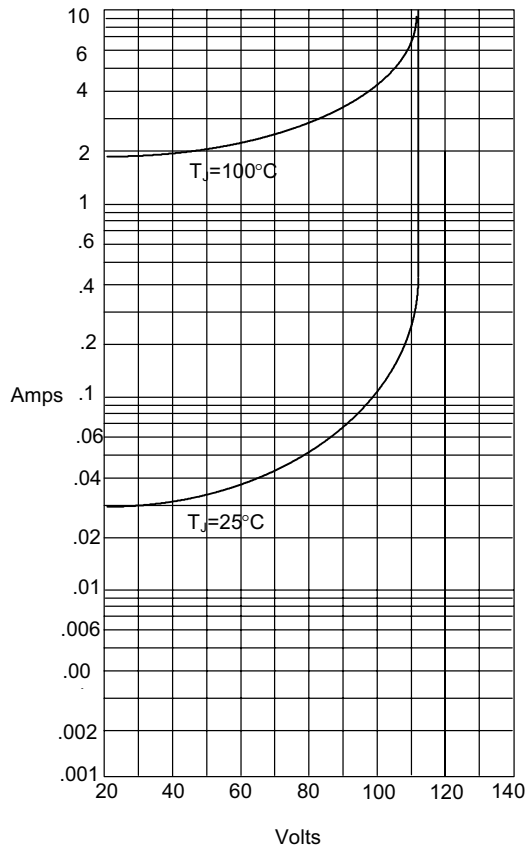
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus* Reverse Voltage - Volts

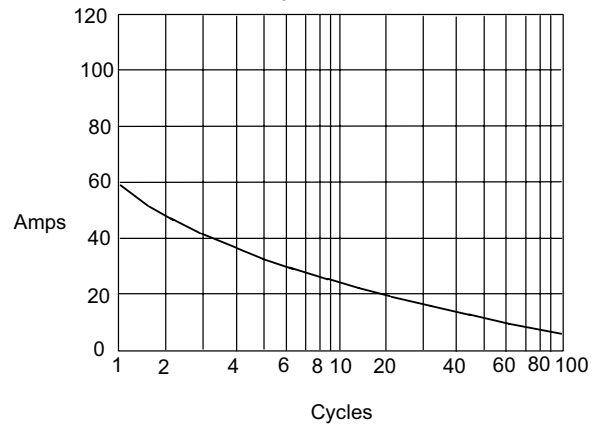
RL201 thru RL207

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Current - Amps 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