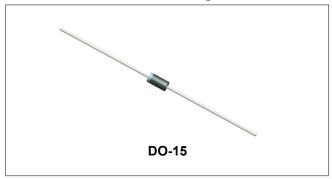






# RL201G THRU RL207G GLASS PASSIVATED SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Amperes



#### **Features**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension
- This is a Pb Free Device
- "-HF" suffix is for Halogen Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### **Circuit Diagram**



#### **Mechanical Data**

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.40 grams

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

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	RL 201G	RL 202G	RL 203G	RL 204G	RL 205G	RL 206G	RL 207G	Units
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	$V_{RRM} \ V_{DC}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum average forward rectified current 0.375"(9.5mm) lead length @T <sub>A</sub> = 75°C	I <sub>(AV)</sub>	2.0				А			
Peak forward surge current 8.3ms single half sinewave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	70.0				А			
Maximum instantaneous forward voltage at 2.0A	$V_{F}$	1.1			V				
Maximum DC reverse current @T <sub>A</sub> = 25°C at rated DC blocking voltage @T <sub>A</sub> = 100°C	$I_R$	5.0 50.0			μA				
Typical Junction Capacitance (Note 1)	Сл	20.0			pF				
Typical Thermal Resistance (Note 2)	RθJA	50.0			°C/W				
Operating and Storage Temperature Range	T <sub>J,</sub> T <sub>STG</sub>	-65 to +175			°C				

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length, P.C.B. mounted

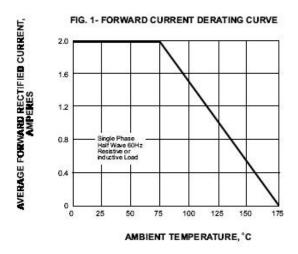
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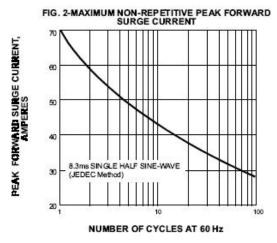


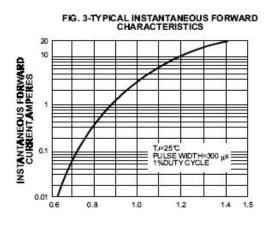


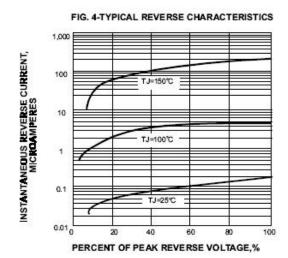


## **Ratings and Characteristics Curves**

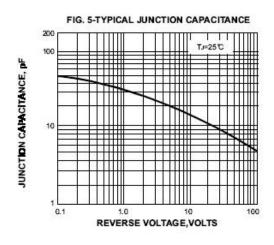


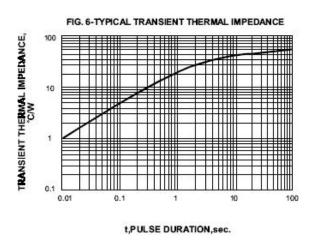






INSTANTANEOUS FORWARD VOLEAGE, VOLTS





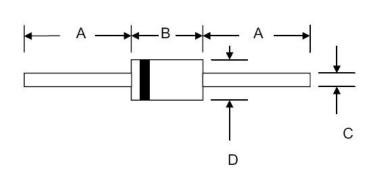
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# **Mechanical Dimensions DO-15**



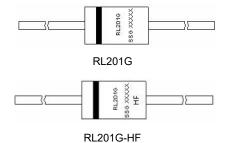
SYMBOL	Millim	neters	Inches			
OTWIDOL	Min.	Max.	Min.	Max.		
Α	25.4	-	1.000	-		
В	5.5	7.62	0.217	0.300		
С	0.7	0.9	0.028	0.034		
D	2.6	3.6	0.104	0.140		

## **Ordering Information**

Device	Package	Shipping
RL201G-RL207G	DO-15	3000pcs /tape
RL201GTA-RL207GTA	DO-15	3000pcs /tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

## **Marking Diagram**

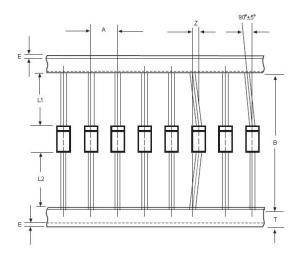


Where XXXXX is YYWWL

RL201G = Type Number HF = Halogen Free SSG = SSG YY = Year WW = Week L = Lot Number

Cautions: Molding resin Epoxy resin UL:94V-0

# **Carrier Tape Specification DO-15**



SYMBOL	Millimeters			
	Min.	Max.		
А	4.50	5.50		
В	50.9	53.9		
Z	-	1.20		
Т	5.60	6.40		
Е	-	0.80		
IL1-L2I	-	1.0		

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