



# RL151G THRU RL157G

## GLASS PASSIVATED JUNCTION RECTIFIER

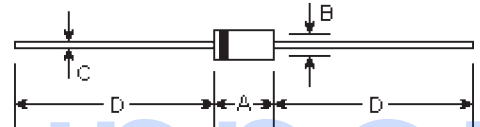
Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.5 Amperes

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame retardant epoxy molding compound
- 1.5 ampere operation at  $T_A=55^\circ\text{C}$  with no thermal runaway
- Glass passivated junction

### 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

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%.

	Symbols	RL 151G	RL 152G	RL 153G	RL 154G	RL 155G	RL 156G	RL 157G	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
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=55^\circ\text{C}$	$I_{(AV)}$	1.5							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	$I_{FSM}$	50.0							Amps
Maximum forward voltage at 1.5A	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	$I_R$	5.0 125.0							μA
Typical junction capacitance (Note 1)	$C_J$	25.0							μF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	45.0							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

#### Notes:

(1) Measured at 1.0MHz and applied reverse voltage of 4.0 VDC

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

# RATINGS AND CHARACTERISTIC CURVES

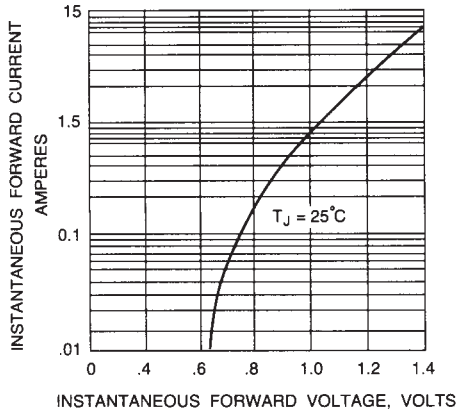


Fig. 1 - TYPICAL FORWARD CHARACTERISTICS

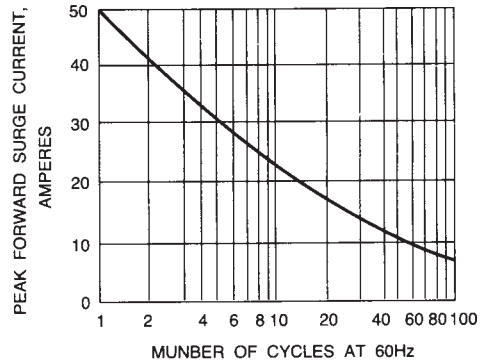


Fig. 2 - PEAK FORWARD SURGE CURRENT

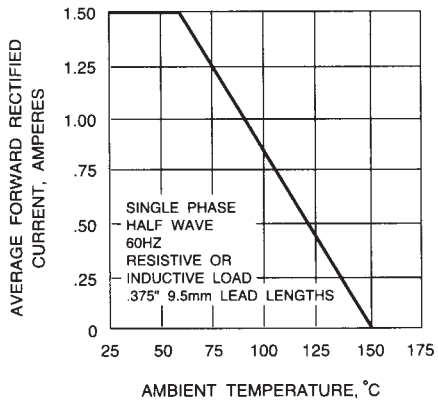


Fig. 3 - FORWARD CURRENT DERATING CURVE

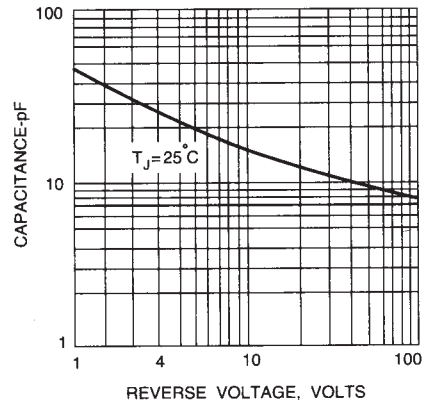


Fig. 4 - TYPICAL JUNCTION CAPACITANCE