

# **RL151G-RG157G**

Glass Passivated Junction Plastic Rectifier



# Features

- Low cost
- ♦ Low leakage
- Low forward voltage drop
- High current capability

# **Mechanical Data**

Case: Molded plastic

♦ Epoxy: Device has UL flammability classification 94V-O

♦ Lead: MIL-STD-202E method 208C guaranteed

Mounting position: Any

♦ Weight: 083 gram

# 300 (7.6) 230 (5.8) 1.0 (25.4) MIN. 1.0 (25.4) MIN. 1.0 (25.4) MIN.

Dimensions in inches and (millimeters)

# **Maximum Ratings and Electrical Characteristics**

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

### MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	RL151G	RL152G	RL153G	RL154G	RL155G	RL156G	RL157G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	lo	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	60						Amps	
Typical Junction Capacitance (Note)	Cı	20							pF
Typical Thermal Resistance	RθJA	50						°C/W	
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175						٥C	

### ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RL151G	RL152G	RL153G	RL154G	RL155G	RL156G	RL157G	UNITS
Maximum Instantaneous Forward Voltage at 1.5A DC		VF	1.1							Volts
Maximum DC Reverse Current	@TA = 25°C		5.0							uAmps
at Rated DC Blocking Voltage	@Ta = 100°C	la la	50							
Maximum Full Load Reverse Current Average, Full Cycle		lR IR	30							uAmps
.375" (9.5mm) lead length at TL = 75°C			30							uAllips

NOTES: Measured at 1 MHz and applied reverse voltage of 4.0 volts



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# RATING AND CHARACTERISTIC CURVES (RL151G THRU RL157G)

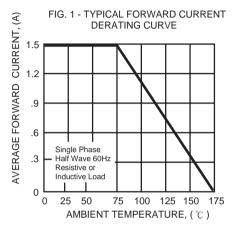


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

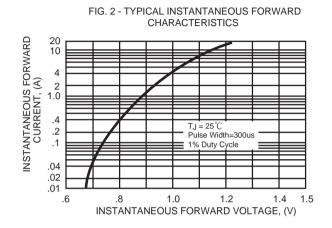
75

60

8.3ms Single Half Sine-Wave (JEDED Method)

15

2 4 6 8 10 20 40 60 80 100 NUMBER OF CYCLES AT 60Hz



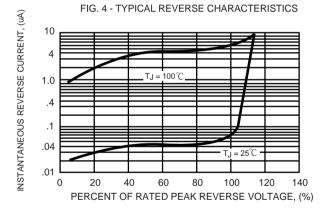


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

