

# RL151 THRU RL157

## GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE: 50 TO 1000V      CURRENT: 1.5A



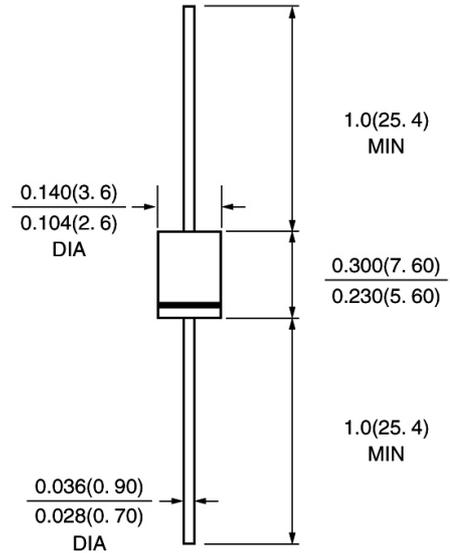
### FEATURE

Molded case feature for auto insertion  
High current capability  
Low leakage current  
High surge capability  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

### DO-15/DO-201AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	RL 151	RL 152	RL 153	RL 154	RL 155	RL 156	RL 157	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at T <sub>a</sub> = 75°C	I <sub>f(av)</sub>	1.5							A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I <sub>fsm</sub>	60.0							A
Maximum Instantaneous Forward Voltage at rated forward current	V <sub>f</sub>	1.1							V
Maximum full load reverse current full cycle at T <sub>L</sub> = 75°C	I <sub>r(av)</sub>	30.0							μA
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 50.0							μA μA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	20.0							pF
Typical Thermal Resistance (Note 2)	R(ja)	50.0							°C/W
Storage and Operation Junction Temperature	T <sub>stg</sub>	-50 to +175							°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES RL151 THRU RL157

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

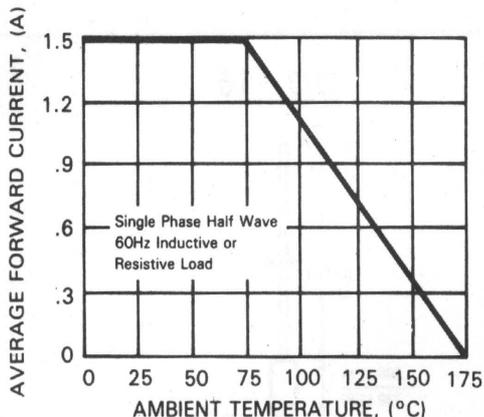


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

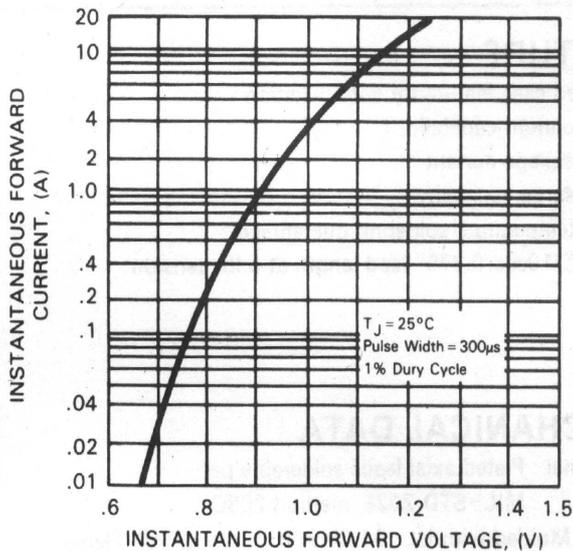


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

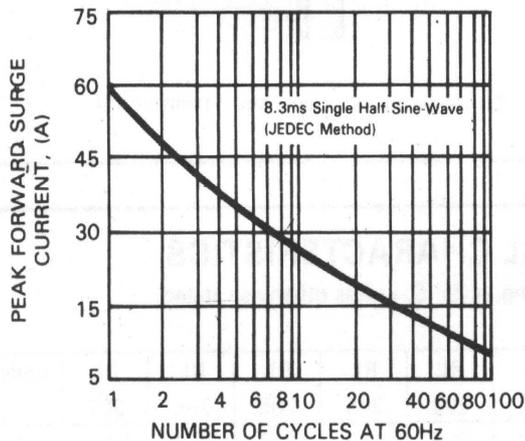


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

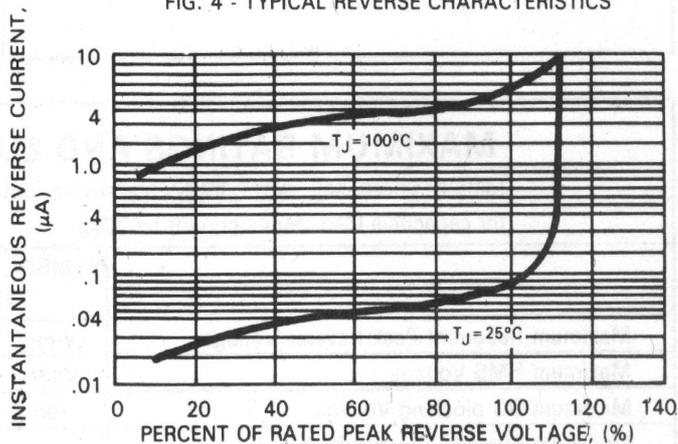


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

