



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

RL251  
THRU  
RL257

**TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER**  
**VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 2.5 Amperes**

**FEATURES**

- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.54 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

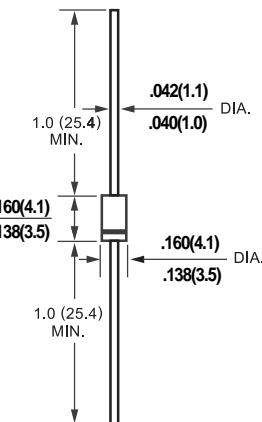
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



R-3



Dimensions in inches and (millimeters)

	SYMBOL	RL251	RL252	RL253	RL254	RL255	RL256	RL257	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>D</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	I <sub>O</sub>				2.5				Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>				150				Amps
Maximum Instantaneous Forward Voltage at 2.5A DC	V <sub>F</sub>				1.0				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@TA = 25°C	@TA = 100°C		5.0				µAmps
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at T <sub>L</sub> = 75°C	C <sub>J</sub>				50				µAmps
Typical Junction Capacitance (Note)					30				µAmps
Typical Thermal Resistance	R <sub>θJA</sub>					35			°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>				-65 to + 175				°C

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