RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

RL151 THRU RL157

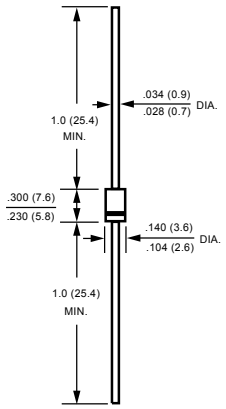
SILICON RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Amperes

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: 0.38 grams

DO-15



Dimensions in inches and (millimeters)

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%.

MAXIMUM RATINGS (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	RL151	RL152	RL153	RL154	RL155	RL156	RL157	UNITS
Maximum Recurrent 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 at T_A = 75 °C	I_O	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							Amps
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	50							°C/W
	$R_{\theta JL}$	20							
Typical Junction Capacitance (Note 2)	C_J	20							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS(@T_A=25 °C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RL151	RL152	RL153	RL154	RL155	RL156	RL157	UNITS
Maximum Instantaneous Forward Voltage at 1.5A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	5							uAmps
	@T_A = 100°C		50							
Maximum Fully Load Reverse Current Average, Fully Cycle .375" (9.5mm) lead length at T_L =75°C			30							

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Typical Thermal Resistance : At 9.5mm lead lengths,PCB mounted.
3. "Fully ROHS complaint", "100% Sn plating (Pb-free)"

2007-09

RATING AND CHARACTERISTICS CURVES (RL151 THRU RL157)

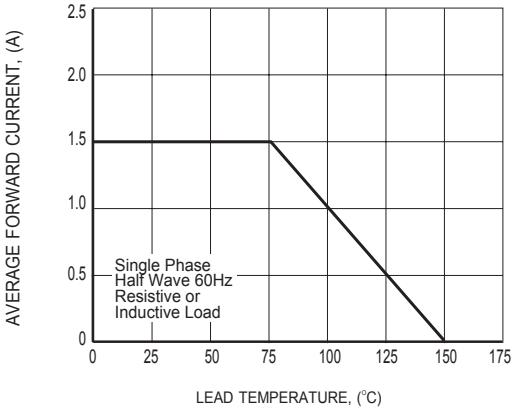


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

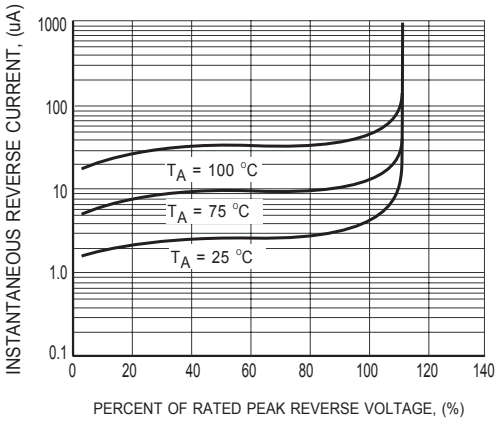


FIG.2 TYPICAL REVERSE CHARACTERISTICS

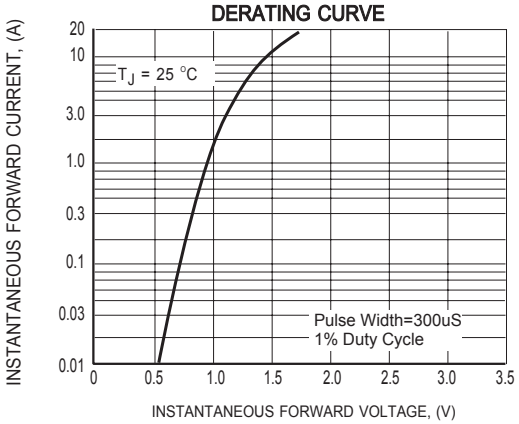


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

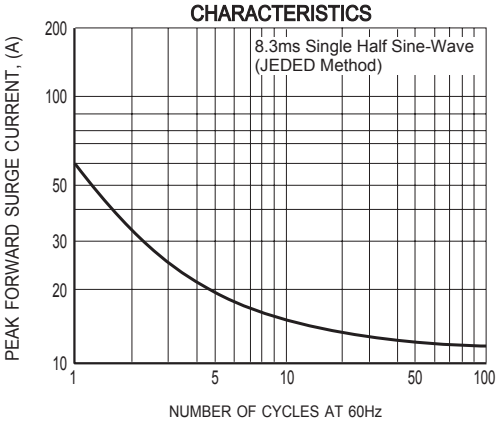


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

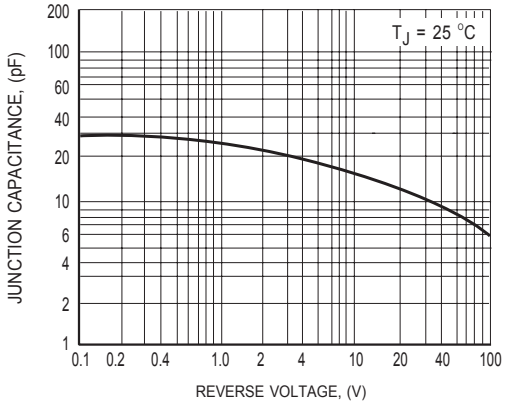


FIG.5 TYPICAL JUNCTION CAPACITANCE

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