SEMICONDUCTOR

RL201 THRU RL207

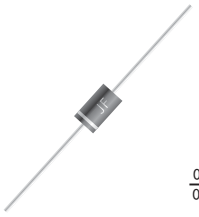
GENERAL PURPOSE PLASTIC RECTIFIER

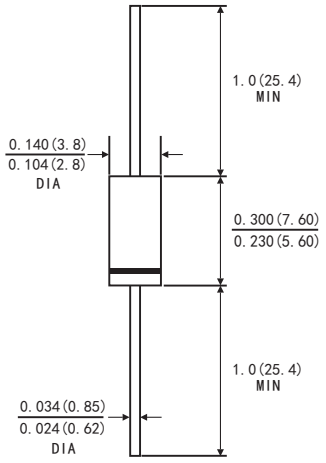
Reverse Voltage - 50 to 1000 Volts
Forward Current -2.0Amperes

FEATURES

- The plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High surge current capability
- 2.0A operation at T_L=75 °C with no thermal runaway
- Low reverse leakage
- High temperature soldering guaranteed: 260°C/10 seconds,0.375"(9.5mm) lead length,5lbs.(2.3kg)tension
  Component in accordance to RoHs 2011/65/EU

DO-15





Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014ounce, 0.39 gram

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 by 20%.)

		Symbols	RL 201	RL 202	RL 203	RL 204	RL 205	RL 206	RL 207	Units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	300	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	300	400	600	800	1000	Volts
Maximum average Forward Rectified Current		$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	70.0							Amps
Maximum Instantaneous Forward Voltage at 2.0 A		V_F	1.1							Volts
Maximum Reverse current at rated DC Blocking Voltage	T_A=25°C	I_R	5.0							μA
	T_A=100°C		500							
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	35.0							°C/W
Typical Junction Capacitance(Note 1)		C_J	8							pF
Operating and Storage Temperature Range		T_J T_{STG}	-55 to+150 -55 to+150							°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

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 RL201 THRU RL207

FIG.1-FORWARD CURRENT DERATING CURVE

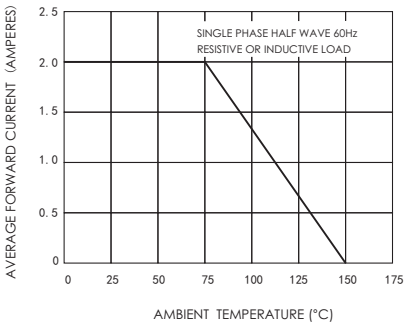


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

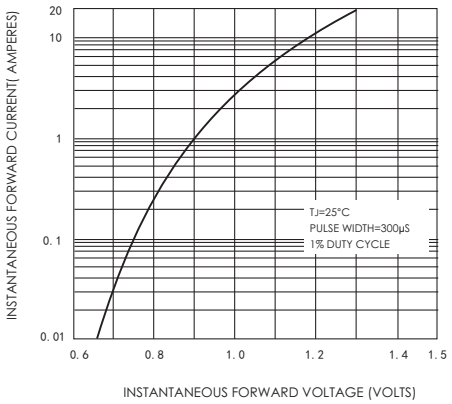


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

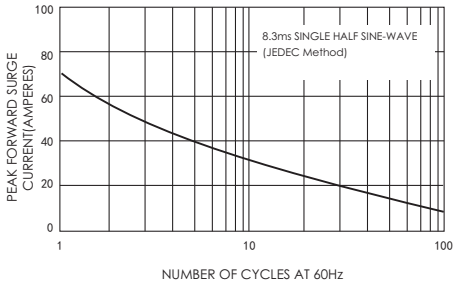


FIG.4-TYPICAL REVERSE CHARACTERISTICS

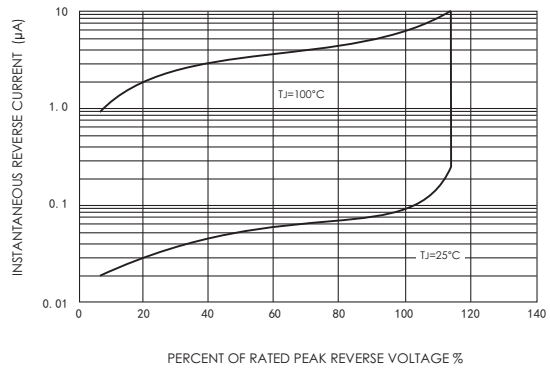


FIG.5-TYPICAL JUNCTION CAPACITANCE