RL201 THRU RL207

GENERAL PURPOSE PLASTIC SILICON RECTIFIER



REVERSE VOLTAGE: 50 to 1000 VOLTS FORWARD CURRENT: 2.0 AMPERE

FEATURES

Plastic package has Underwriters Laboratory
Flammability Classification 94V-O ctilizing
Flame Retardant Epoxy Molding Compound.

· Exceeds environmental standards of MIL-S-19500/228

MECHANICAL DATA

Case: Molded plastic, DO-15

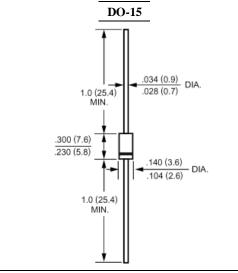
Epoxy: UL 94V-O rate flame retardant

Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any Weight: 0.015ounce, 0.4gram



Dimensions in inches and (millimeters)

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 current by 20%.

	Symbols	RL201	RL202	RL203	RL204	RL205	RL206	RL207	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 .375"(9.5mm) Lead Length at T _A =75℃	I _(AV)	2.0							Amp
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I _{FSM} 70							Amp	
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage	V _F	1.1							Volts
at 2.0A DC and 25℃	v _F								
Maximum Reverse Current at T _A =25℃	т	5.0							uAmp
at Rated DC Blocking Voltage T _A =100℃	I_R	50							
Typical Junction Capacitance (Note 1)	C_{J}	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
Operating Junction Temperature Range	T_{J}	-55 to +150							ဗ
Storage Temperature Range	Tstg	-55 to +150							ဗ

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.



RATINGS AND CHARACTERISTIC CURVES

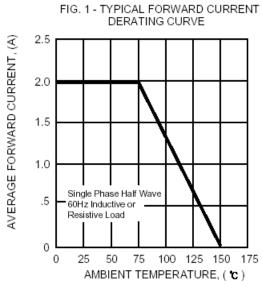
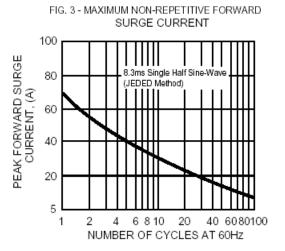
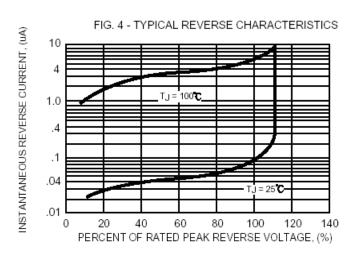


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS 20 INSTANTANEOUS FORWARD CURRENT, (A) 4 2 1.0 .4 .2 TJ = 25 **C** .1 ulse Width=300uS 1% Duty Cycle .04 .02 .01 .6 1.5 INSTANTANEOUS FORWARD VOLTAGE, (V)





200 JUNCTION CAPACITANCE, (p.F.) 100 60 40 20 10 4 2 .2 2 20 40 .1 1.0 4 10 REVERSE VOLTAGE, (V)

FIG. 5 - TYPICAL JUNCTION CAPACITANCE