RL20X SERIES

GENERAL PURPOSE PLASTIC SILICON RECTIFIER

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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.

 \cdot 2.0 ampere operation at T_A =75 with no thermal runaway.

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

MECHANICAL DATA

Case: Molded plastic, DO-15

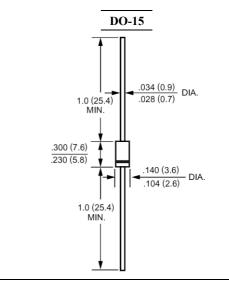
Epoxy: UL 94V-O rate flame retardant

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 ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

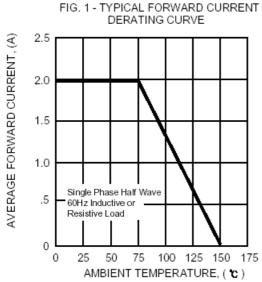
	Symbols	RL201	RL202	RL203	RL204	RL205	RL206	RL207	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	T	2.0							Amp
.375"(9.5mm) Lead Length at T _A =75	I _(AV)								
Peak Forward Surge Current,									
8.3ms single half-sine-wave	I_{FSM}	I _{FSM} 70							Amp
superimposed on rated load (JEDEC method)									
Maximum Forward Voltage		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	500							
Typical Junction Capacitance (Note 1)	$C_{\mathbf{J}}$	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							/W
Operating Junction Temperature Range	T_{J}	-55 to +150							
Storage Temperature Range	Tstg	-55 to +150							

NOTES:

- 1- Measured at 1 $\ensuremath{\text{MH}_{\text{Z}}}$ 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.



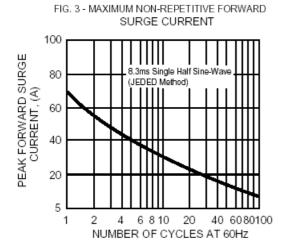
RATINGS AND CHARACTERISTIC CURVES

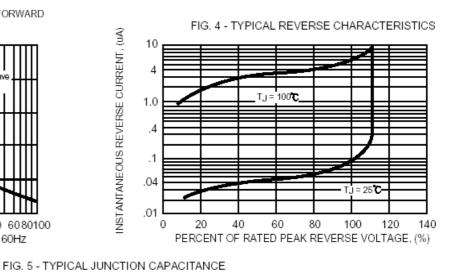


20 10 INSTANTANEOUS FORWARD CURRENT, (A) 4 2 1.0 .4 .2 TJ = 25 C .1 Pulse Width=300uS 1% Duty Cycle .04 .02 .01 .6 .8 1.5 1.0 INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 2 - TYPICAL INSTANTANEOUS FORWARD

CHARACTERISTICS





200 JUNCTION CAPACITANCE, (pF) 100 60 40 20 10 6 4 2 .1 1.0 2 4 10 40

REVERSE VOLTAGE, (V)