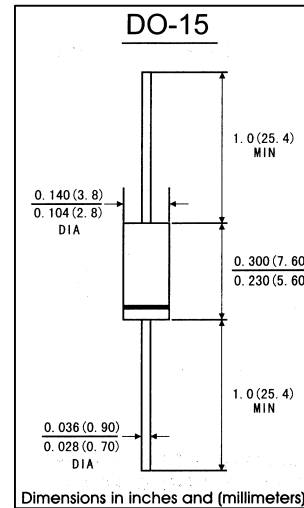


## FEATURES

- . The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- . Construction utilizes void-free molded plastic technique
- . High surge current capability
- . 2.0A operation at  $T_L=75^{\circ}\text{C}$  with no thermal runaway
- . Low reverse leakage
- . High temperature soldering guaranteed:  $250^{\circ}\text{C}/10$  seconds,  $0.375''(9.5\text{mm})$ lead length,  $5\text{lbs.}(2.3\text{kg})$ tension

## 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:** 0.014 ounce, 0.33 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at  $25^{\circ}\text{C}$  ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

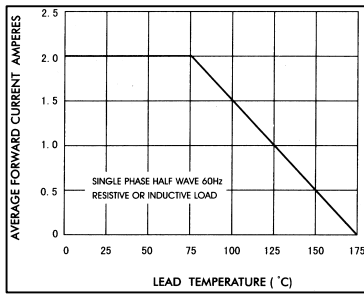
	Symbols	RL 201	RL 202	RL 203	RL 204	RL 205	RL 206	RL 207	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	300	400	600	200	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	210	280	420	140	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	300	400	600	200	1000	Volts
Macimum average forward rectified current $0.375''(9.5\text{mm})$ lead length at $T_A=70^{\circ}\text{C}$	$I_{(AV)}$	2.0							Amps
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method) $T_A=70^{\circ}\text{C}$	$I_{FSM}$	70.0							Amps
Maximum instantaneous forward voltage at 1.5 A	$V_F$	1.1							Volts
Maximum reverse current at rated DC blocking voltage	$T_A=25^{\circ}\text{C}$	5.0							$\mu\text{A}$
	$T_A=100^{\circ}\text{C}$								
Typeical thermal resistance(Note 2)	$R\theta_{JA}$	40.0							$^{\circ}\text{C}/\text{W}$
Typical junction Capacitance(Note 1)	$C_J$	20.0							pF
Operating and storage temperature range	$T_J$	-50 to +175							$^{\circ}\text{C}$
	$T_{STG}$								

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

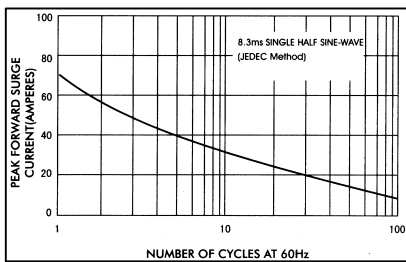
2. Thermal resistance from junction to ambient and from junction lead at  $0.375''(9.5\text{mm})$ lead length, P.C.B. Mounted

**RATINGS AND CHARACTERISTIC CURVES RL201 THRU RL207**

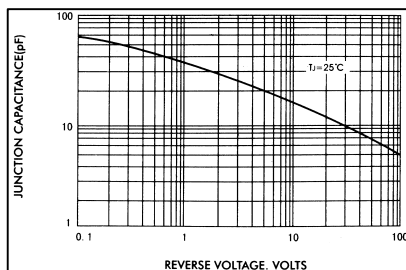
**FIG.1-FORWARD CURRENT DERATING CURVE**



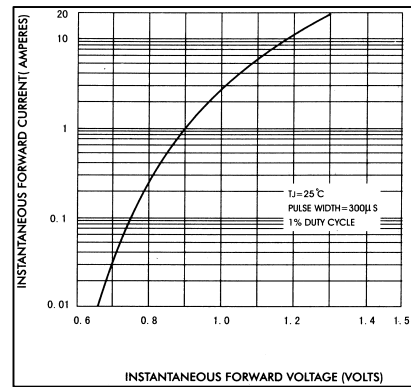
**FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**



**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

