

Pb Free Plating Product

## RL201 thru RL207



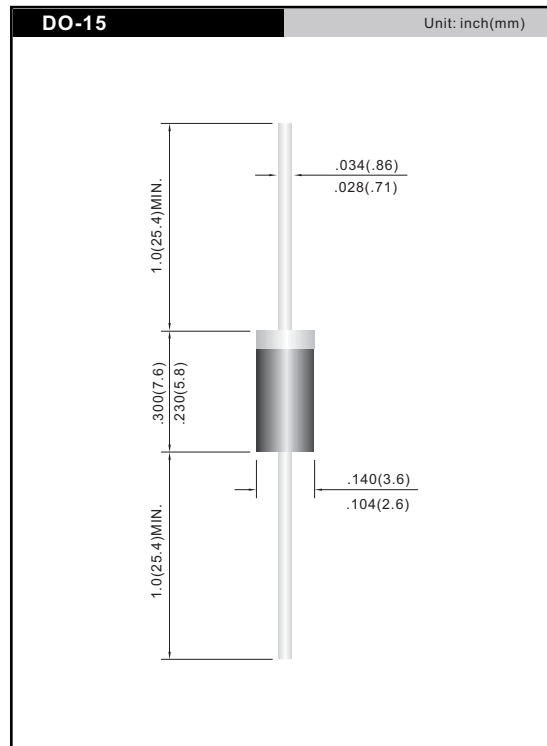
### 2.0 Ampere Silicon General Purpose Rectifier Diodes

#### Features

- High surge current capability
- 2.0 ampere operation at  $T_A = 75^\circ\text{C}$  with no thermal runaway
- Low reverse leakage
- Construction utilizes void-free molded plastic technique.
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs (2.3kg) tension

#### Mechanical Data

- **Case:** Molded plastic, DO-15.
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end.
- **Mounting Position:** Any.



#### Absolute Maximum Ratings and Characteristics @ 25 °C unless otherwise specified.

	Symbols	RL201	RL202	RL203	RL204	RL205	RL206	RL207	Units
Maximum repetitive 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 current at $T_A = 75^\circ\text{C}$	$I_{(AV)}$	2							Amps
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	$I_{FSM}$	70							Amps
Maximum instantaneous forward voltage at $I_{FM} = 2.0\text{A}$ , $T_A = 25^\circ\text{C}$ (Note 2)	$V_F$	1							Volts
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	5 50							$\mu\text{A}$
Typical thermal resistance	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Typical junction capacitance (Note 1)	$C_J$	20							pF
Operating and storage temperature range	$T_J, T_S$	-65 to +175							$^\circ\text{C}$

#### Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4volts
- (2) Pulse test: pulse width 300 uSec, Duty cycle 1%.

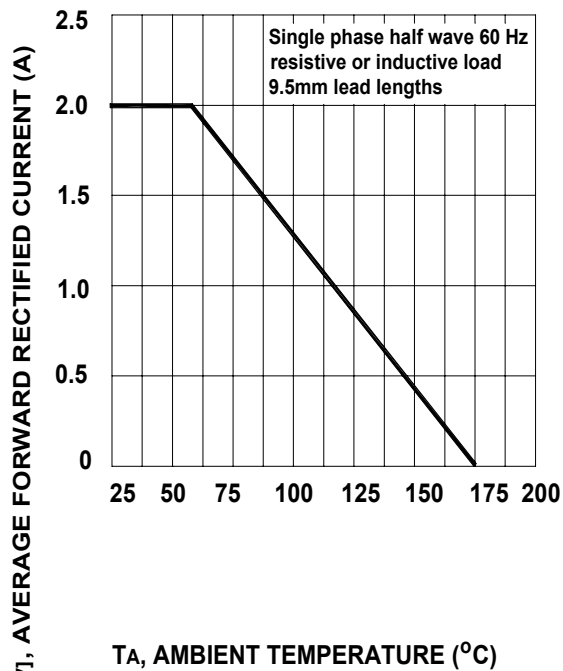


Fig.1 Forward Current Derating Curve

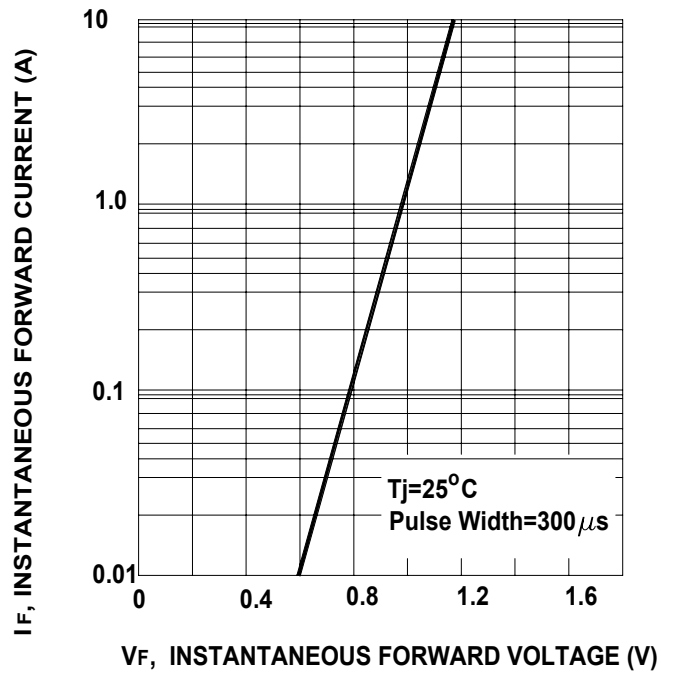


Fig.2 Typical Forward Characteristics

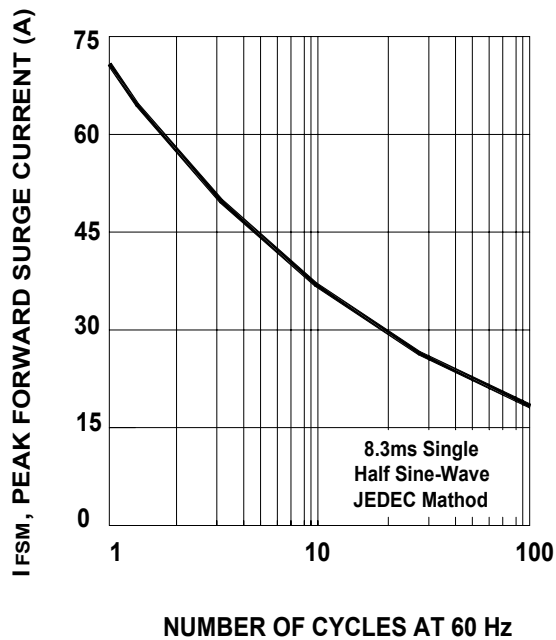


Fig.3 Max Non-Repetitive Peak Forward Surge Current

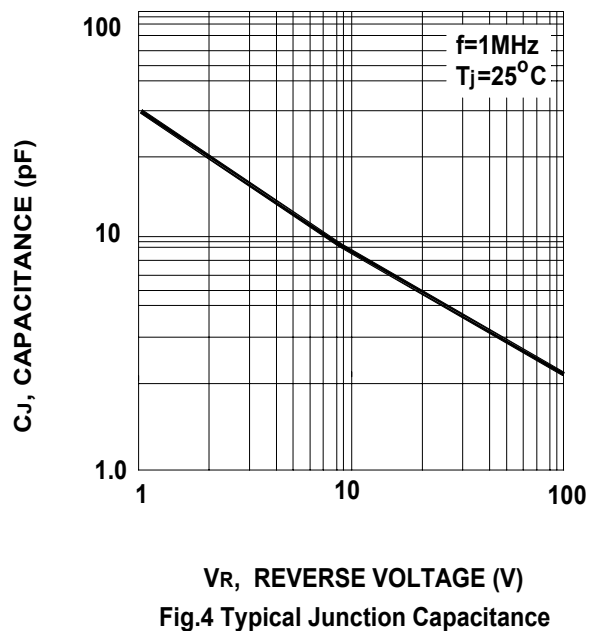


Fig.4 Typical Junction Capacitance