# RL251 ~ RL257 <br> 2.5Amp Silicon Rectifiers 

## Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: $250^{\circ} \mathrm{C} / 10$ seconds, $0.375^{\prime \prime}(9.5 \mathrm{~mm})$ lead length, 5 lbs . (2.3kg) tension


## Mechanical Data

Case: JEDEC DO-15 molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight : 0.014 ounce, 0.4 grams


## Maximum Ratings And Electrical Characteristics

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

|  | SYMBOLS | RL251 | RL252 | RL253 | RL254 | RL255 | RL256 | RL257 | UNITS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum repetitive peak reverse voltage | $V_{\text {rrm }}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | Vrms | 35 | 70 | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | V ${ }_{\text {c }}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VoLTS |
| Maximum average forward rectified current $0.375^{\prime \prime}(9.5 \mathrm{~mm})$ lead length at $\mathrm{T}_{\mathrm{A}}=75^{\circ} \mathrm{C}$ | I (Av) | 2.5 |  |  |  |  |  |  | Amp |
| Peak forward surge current <br> 8.3 ms single half sine-wave superimposed on rated load (J EDEC Method) | Ifsm | 150 |  |  |  |  |  |  | Amps |
| Maximum instantaneous forward voltage at 2.0A | $\mathrm{V}_{\mathrm{F}}$ | 1.0 |  |  |  |  |  |  | Volts |
| Maximum DC reverse current $\mathrm{TA}=25^{\circ} \mathrm{C}$ at rated DC blocking voltage $\mathrm{T}_{\mathrm{A}}=100^{\circ} \mathrm{C}$ | IR | $\begin{gathered} 5.0 \\ 50.0 \end{gathered}$ |  |  |  |  |  |  | uA |
| Typical junction capacitance (Note 1) | C ${ }^{\text {a }}$ | 35 |  |  |  |  |  |  | pF |
| Typical thermal resistance (Note 2) | RqıA | 35.0 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |
| Operating junction and storage temperature range | $\mathrm{T}_{\mathrm{J}, \mathrm{Tstg}}$ | -50 to +155 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |

Note:1.Measured at 1 MHz and applied reverse voltage of 4.0 V D.C.
2.Thermal resistance from junction to ambient at 9.5 mm lead length,P.C.B. mounted

