



SILICON RECTIFIERS

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

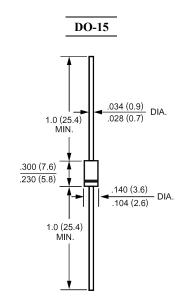
Epoxy: UL 94V-O rate flame retardant

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 .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} | I _{FSM} 70 | | | | | | | Amp |
| superimposed on rated load (JEDEC method) | | | | | | | | | |
| Maximum Forward Voltage at 2.0A DC and 25 | $V_{\rm F}$ | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at T _A =25 | | 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 +125 | | | | | | | |
| Storage Temperature Range | Tstg | -55 to +125 | | | | | | | |

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. 1 - TYPICAL FORWARD CURRENT DERATING CURVE 2.5 AVERAGE FORWARD CURRENT, (A) 2.0 1.5 1.0 Single Phase Half Wave .5 60Hz Inductive or Resistive Load 0 0 25 75 100 125 150 50 175 AMBIENT TEMPERATURE, (tc)

FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

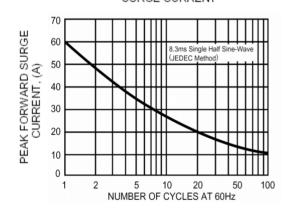


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

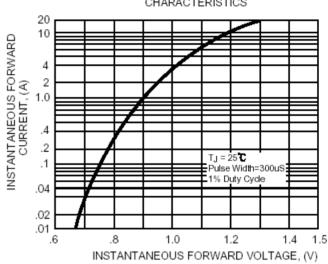


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

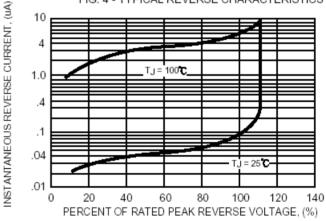


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

