



**VOLTAGE RANGE: 50 — 1000 V**

**CURRENT: 2.0 A**

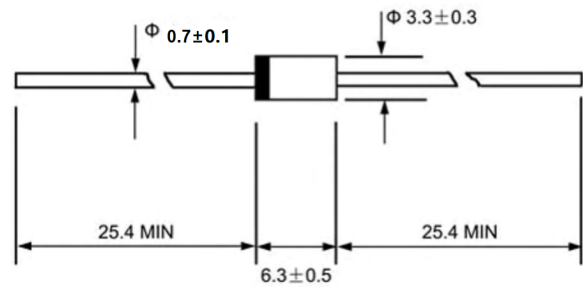
### Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Glass passivated junction
- ◇ High current capability
- ◇ Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

### Mechanical Data

- ◇ Case: JEDEC DO-15, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: Any
- ◇ Weight: 0.014 ounces, 0.39 grams

### DO-15



Dimensions in millimeters

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

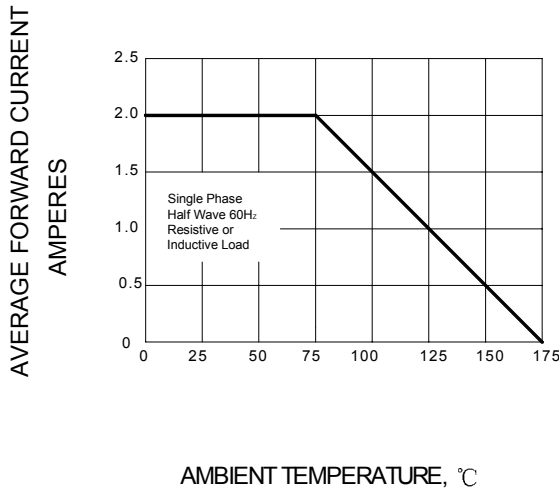
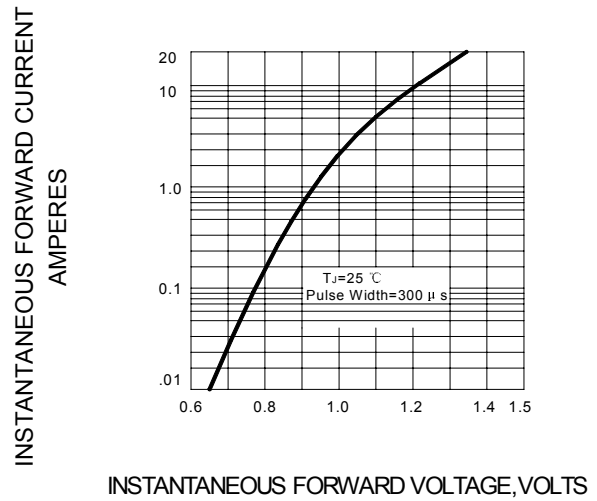
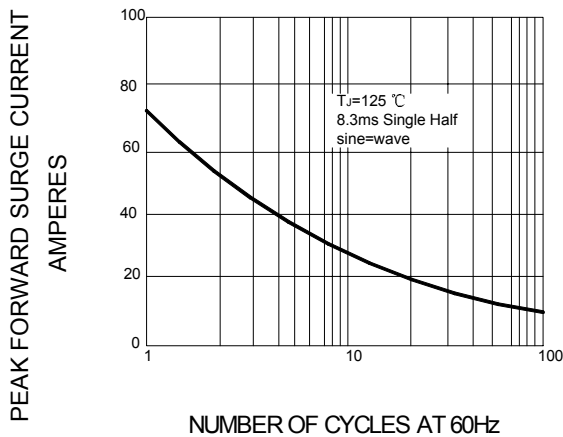
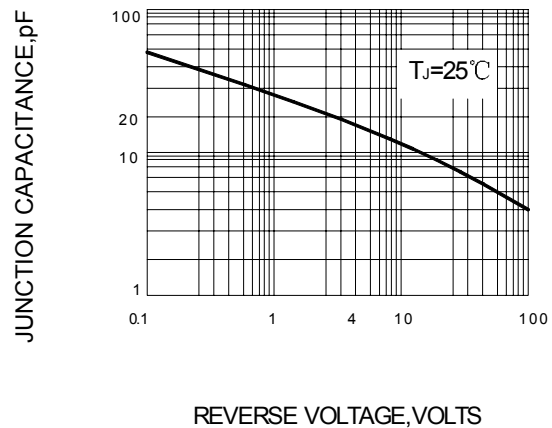
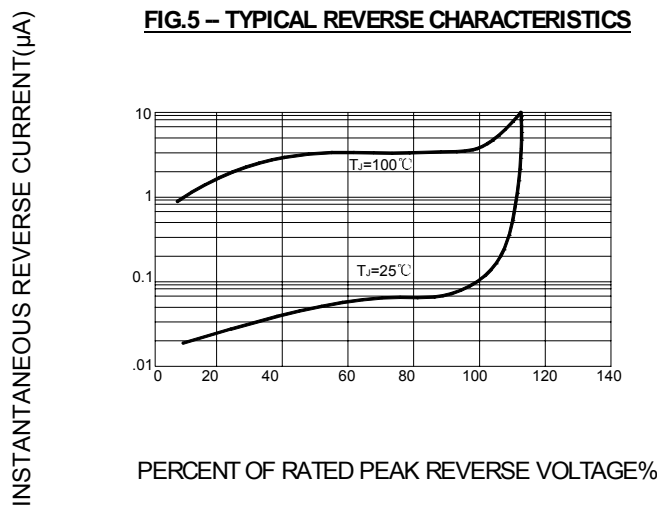
|   |                 | RL201G      | RL202G | RL203G | RL204G | RL205G | RL206G | RL207G | UNITS        |
|---|-----------------|-------------|--------|--------|--------|--------|--------|--------|--------------|
| Maximum recurrent peak reverse voltage  | $V_{RRM}$       | 50          | 100    | 200    | 400    | 600    | 800    | 1000   | V            |
| Maximum RMS voltage   | $V_{RMS}$       | 35          | 70     | 140    | 280    | 420    | 560    | 700    | V            |
| Maximum DC blocking voltage   | $V_{DC}$        | 50          | 100    | 200    | 400    | 600    | 800    | 1000   | V            |
| Maximum average forward rectified current<br>9.5mm lead length, @ $T_A=75^\circ C$                          | $I_{F(AV)}$     | 2.0         |        |        |        |        |        |        | A            |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load @ $T_J=125^\circ C$ | $I_{FSM}$       | 70.0        |        |        |        |        |        |        | A            |
| Maximum instantaneous forward voltage<br>@2.0 A   | $V_F$           | 1.1         |        |        |        |        |        |        | V            |
| Maximum reverse current @ $T_A=25^\circ C$<br>at rated DC blocking voltage @ $T_A=100^\circ C$              | $I_R$           | 5.0<br>50.0 |        |        |        |        |        |        | $\mu A$      |
| Typical junction capacitance (Note1)  | $C_J$           | 20          |        |        |        |        |        |        | pF           |
| Typical thermal resistance (Note2)  | $R_{\theta JA}$ | 40          |        |        |        |        |        |        | $^\circ C/W$ |
| Operating junction temperature range  | $T_J$           | -55----+175 |        |        |        |        |        |        | $^\circ C$   |
| Storage temperature range   | $T_{STG}$       | -55----+175 |        |        |        |        |        |        | $^\circ C$   |

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.



## Ratings AND Characteristic Curves

**FIG.1 – FORWARD DERATING CURVE**

**FIG.2 – TYPICAL FORWARD CHARACTERISTIC**

**FIG.3 – PEAK FORWARD SURGE CURRENT**

**FIG.4 – TYPICAL JUNCTION CAPACITANCE**

**FIG.5 – TYPICAL REVERSE CHARACTERISTICS**


| PACKAGE | SPQ/PCS   | CARTON SPQ/PCS | CARTON SIZE/CM | CARTON GW/KG | CARTON NW/KG |
|---------|-----------|----------------|----------------|--------------|--------------|
| DO-15   | 3000/AMMO | 30000          | 42X28X31       | 12.00        | 10.00        |