



VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.0 A

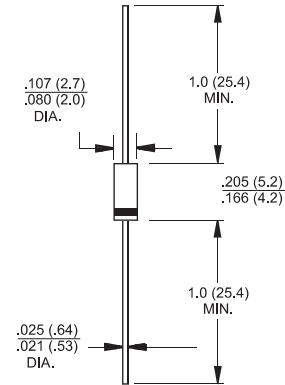
Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Glass passivated chip junction
- ◇ High forward voltage drop
- ◇ 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 A - 405, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.008 ounces, 0.23 grams
- ◇ Mounting position: Any

A-405



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

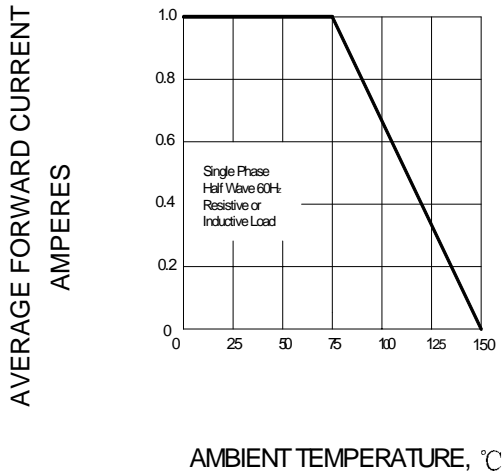
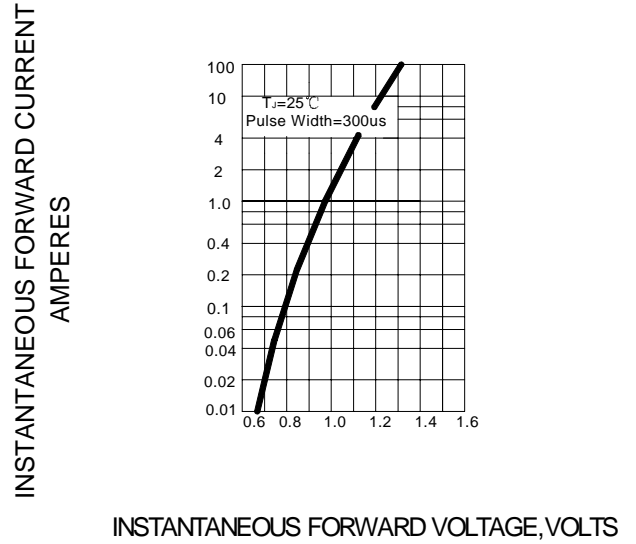
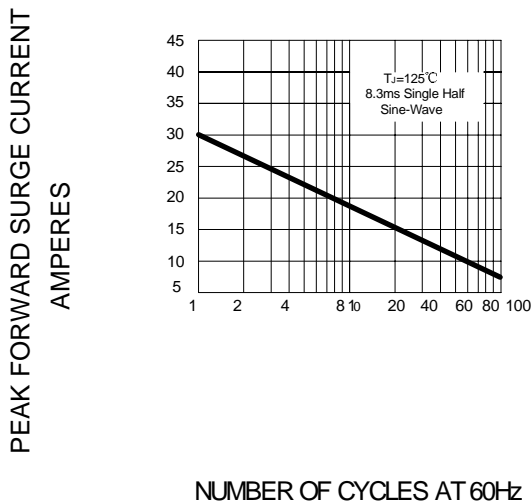
Ratings at 25°C ambient temperature unless otherwise specified.

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

| | | RL 101G | RL 102G | RL 103G | RL 104G | RL 105G | RL 106G | RL 107G | 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 9.5mm lead length, @ $T_A=75^\circ\text{C}$ | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_A=125^\circ\text{C}$ | I_{FSM} | 30.0 | | | | | | | A |
| Maximum instantaneous forward voltage @ 1.0 A | V_F | 1.0 | | | | | | | V |
| Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$ | I_R | 5.0 50.0 | | | | | | | μA |
| Typical junction capacitance (Note1) | C_J | 15 | | | | | | | pF |
| Typical thermal resistance (Note2) | $R_{\theta JA}$ | 50 | | | | | | | $^\circ\text{C/W}$ |
| Operating junction temperature range | T_J | -55-----+150 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55-----+150 | | | | | | | $^\circ\text{C}$ |

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
