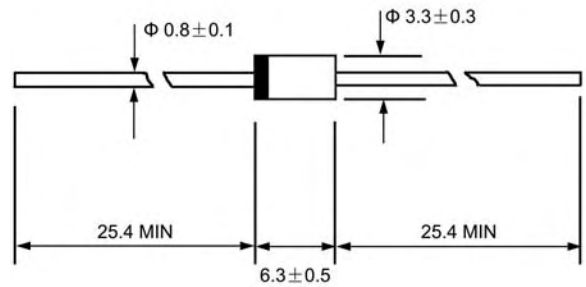


Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low reverse 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



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

| Type Number | | RL251G | RL252G | RL253G | RL254G | RL255G | RL256G | RL257G | UNITS |
|--|-----------------|-------------|--------|--------|--------|--------|--------|--------|-------|
| Maximum Repetitive 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 @TL=75°C | $I_{F(AV)}$ | 2.5 | | | | | | | A |
| Peak Forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150 | | | | | | | A |
| Maximum instantaneous forward voltage at 2.5A(note2) | V_F | 1.1 | | | | | | | V |
| Maximum reverse current at rated DC blocking voltage | @TA=25°C | 5.0 | | | | | | | μA |
| | @TA=100°C | 50 | | | | | | | |
| Typical junction capacitance (note1) | C_J | 35 | | | | | | | pF |
| Typical thermal resistance | $R_{\theta JA}$ | 35 | | | | | | | °C/W |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | | °C |

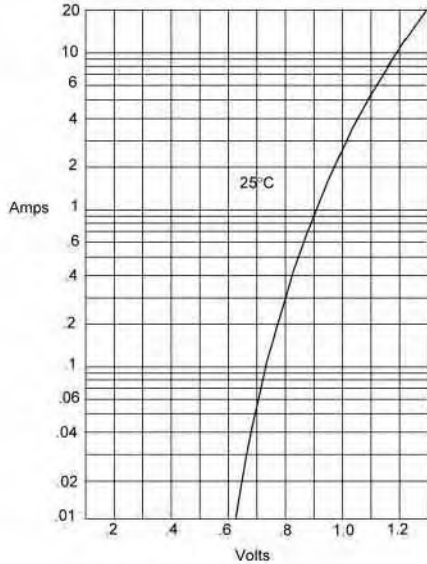
Notes:

- (1) Measured at 1.0MHz and applied reverse voltage of 4.0 volts
- (2) Pulse test: pulse width 300uSec, Duty cycle 1%



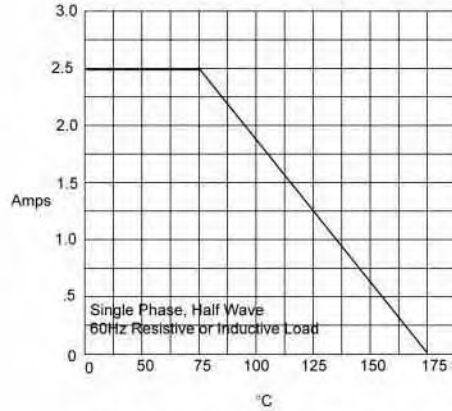
RATINGS AND CHARACTERISTIC CURVES

Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

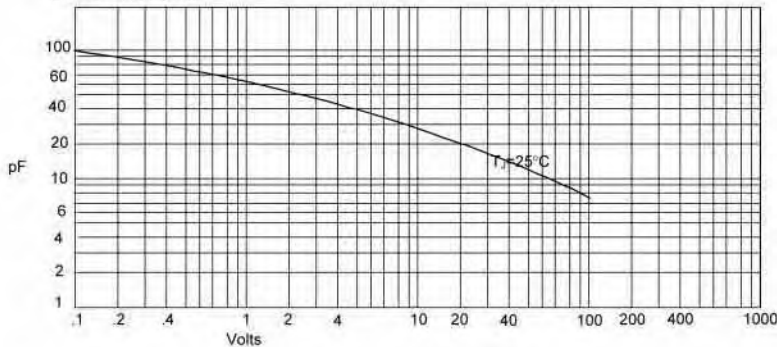
Figure 2
Forward Derating Curve



Single Phase, Half Wave
60Hz Resistive or Inductive Load

Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

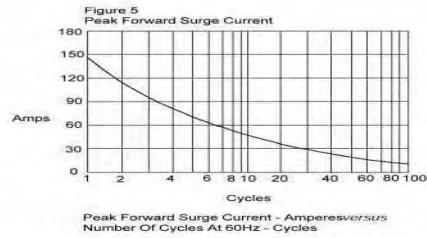
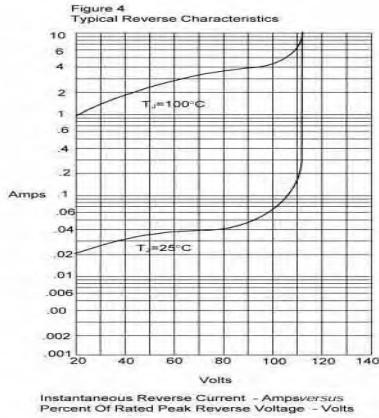
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts



RATINGS AND CHARACTERISTIC CURVES



| 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 |