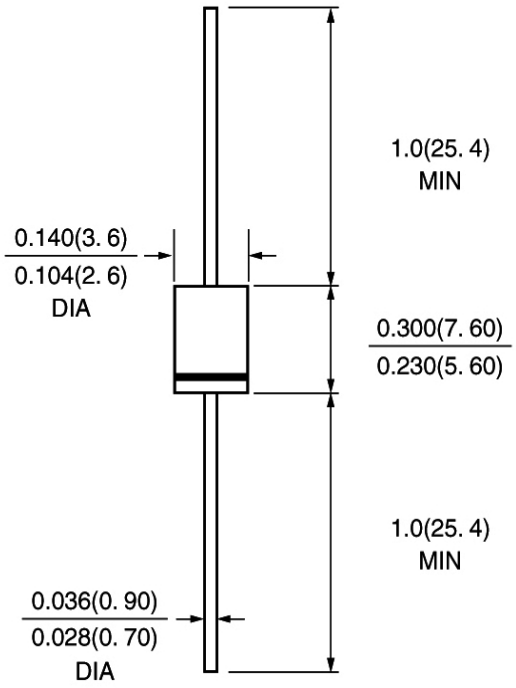
CURRENT 1.5 Ampere
VOLTAGE RANG 50 to 1000 Volts

# RL151 THRU RL157

DO-15\DO-204AC




Dimensions in inches and (millimeters)

## FEATURES

- Low coat construction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260 /10 secods/.375 (9.5mm)lead length at 5 lbs(2.3kg) tension

## MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.014 ounce, 0.39 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25$^{O}$C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

| | SYMBOLS | RL151 | RL152 | RL153 | RL154 | RL155 | RL156 | RL157 | UNIT |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Repetitive 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 0.375 (9.5mm) lead length at $T_A$= 50 | $I_{(AV)}$ | 1.5 | | | | | | | Amps |
| Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method) | $I_{FSM}$ | 30 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage @ 1.5A | $V_F$ | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per element $T_A$ = 25 | $I_R$ | 5.0 | | | | | | | µA |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per element $T_A$ = 100 | $I_R$ | 50 | | | | | | | µA |
| Maximum Full Load Reverse Current, full cycle average 0.375 (9.5mm)lead length at $T_L$=75 | $I_{R(AV)}$ | 30 | | | | | | | µA |
| Typical Junction Capacitance (Note 1) | $C_J$ | 20 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 50 | | | | | | | /W |
| Operating Junction Temperature Range | $T_J$ | -55 to +150 | | | | | | | |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | |

**Notes:**

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to Ambient at .375 (9.5mm)lead length, P.C.board mounted.

CURRENT 1.5 Ampere
VOLTAGE RANG 50 to 1000 Volts

# RL151 THRU RL157

## RATING AND CHRACTERISTIC CURVES RL151 Thru RL157

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

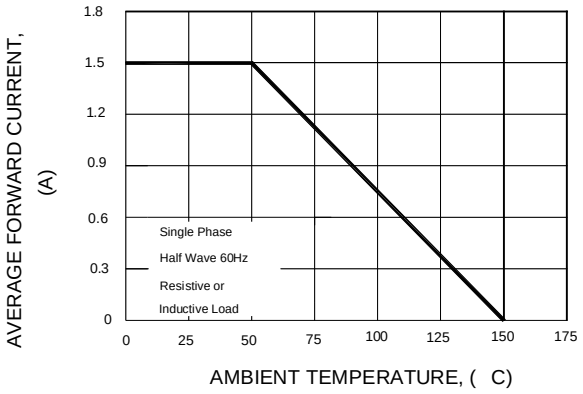



FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

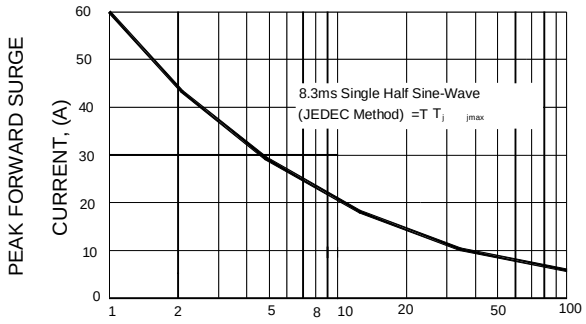



FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

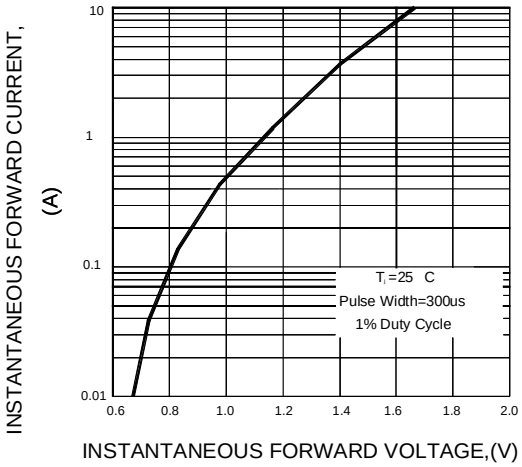



FIG.4-TYPICAL REVERSE CHARACTERISTICS

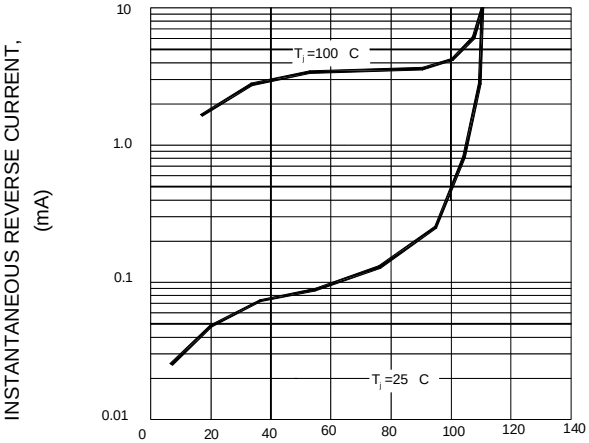



FIG.5-TYPICAL JUNCTION CAPACITANCE

