

RL201-G Thru. RL207-G

Forward Current: 2.0A

Reverse Voltage: 50 to 1000V

RoHS Device



Features

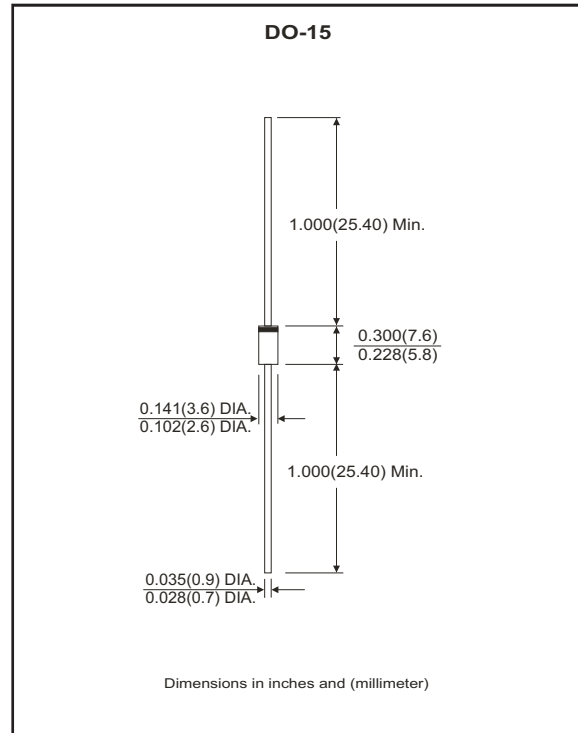
- Diffused Junction.
- Low forward voltage drop.
- Low reverse leakage current.
- High current capability.

Mechanical data

- Case: JEDEC DO-15 molded plastic.
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end

Mounting position: Any

- Weight: 0.39gram



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load derate current by 20%.

| Parameter | Symbol | RL201-G | RL202-G | RL203-G | RL204-G | RL205-G | RL206-G | RL207-G | Unit |
|------------------------------------------------------------------------------------------------------------|-----------------|------------|---------|---------|---------|---------|---------|---------|---------------------------|
| 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 0.375"(9.5mm) lead length @ $T_A=50^\circ\text{C}$ | $I_{(AV)}$ | 2.0 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 60 | | | | | | | A |
| Maximum forward voltage at 2.0A DC | V_F | 1.1 | | | | | | | V |
| Maximum reverse current @ $T_J=25^\circ\text{C}$ at rated DC blocking voltage @ $T_J=100^\circ\text{C}$ | I_R | 5 50 | | | | | | | μA |
| Typical junction capacitance (Note 1) | C_J | 20 | | | | | | | pF |
| Typical thermal resistance (Note 2) | $R_{\theta JA}$ | 40 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating temperature range | T_J | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to ambient.

Company reserves the right to improve product design , functions and reliability without notice.

REV:B

RATING AND CHARACTERISTIC CURVES (RL201-G Thru. RL207-G)

Fig.1 Forward Current Derating Curve

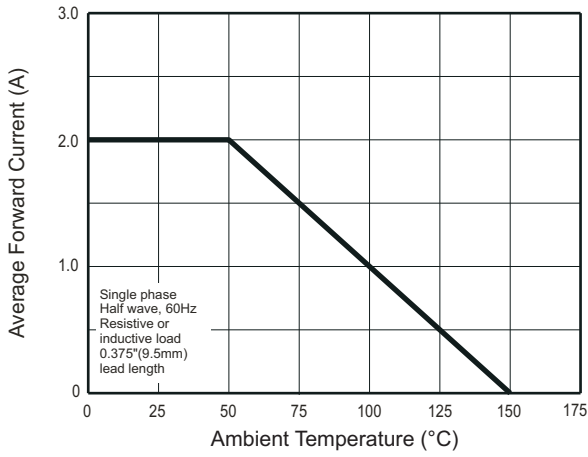


Fig.2 Max. Non-repetitive Surge Current

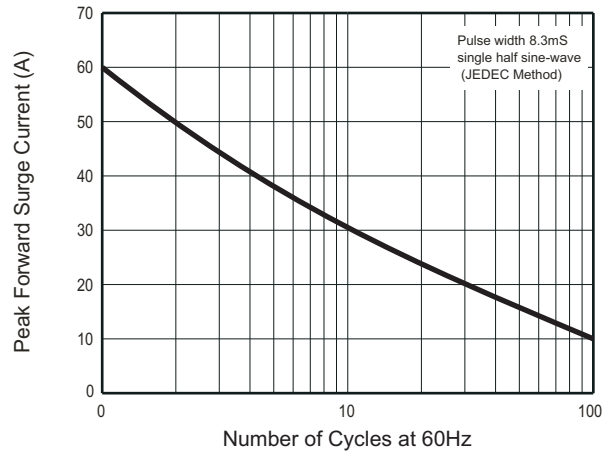


Fig.3 Typical Junction Capacitance

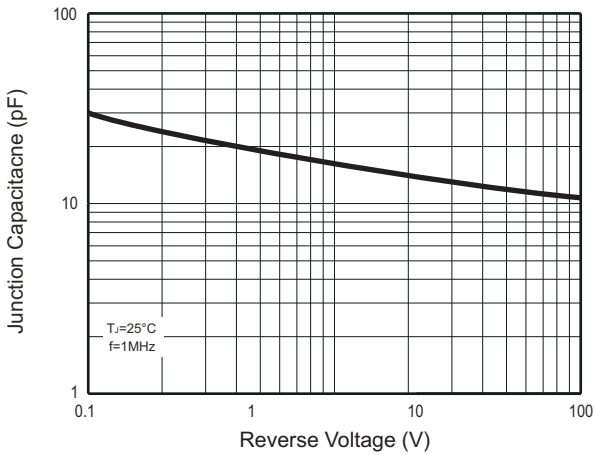
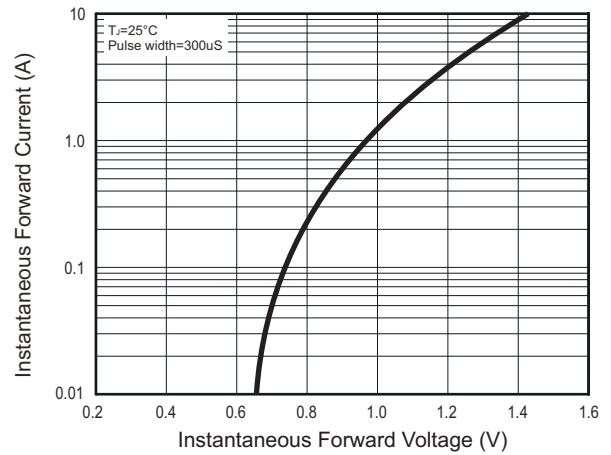


Fig.4 Typical Forward Characteristics



Marking Code

| Part Number | Marking code |
|-------------|--------------|
| RL201-G | RL201 |
| RL202-G | RL202 |
| RL203-G | RL203 |
| RL204-G | RL204 |
| RL205-G | RL205 |
| RL206-G | RL206 |
| RL207-G | RL207 |

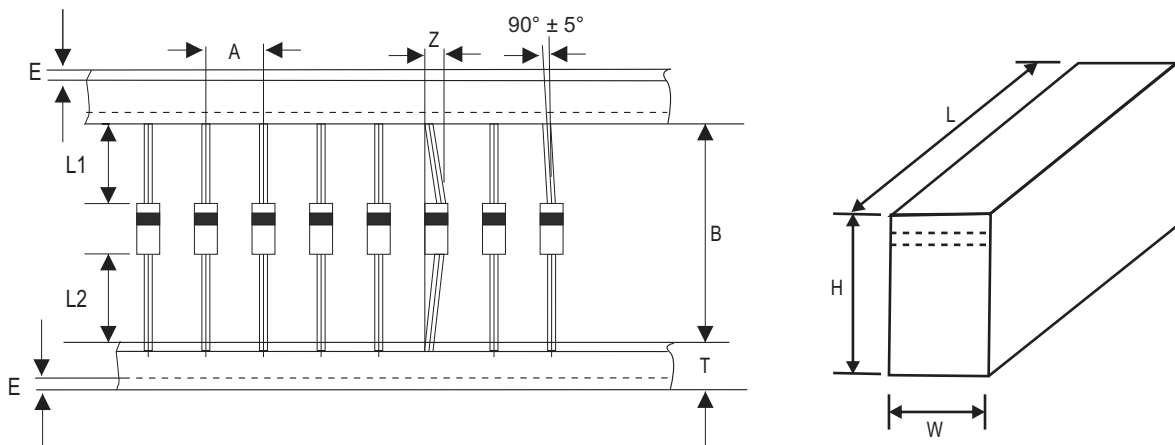


XXX = Product type marking code

Standard Packaging

| Case Type | AMMO PACK | |
|-----------|-----------|--------------|
| | BOX (pcs) | CARTON (pcs) |
| DO-15 | 3,000 | 30,000 |

Taping Specification For Axial Lead Diodes



| DO-15 | SYMBOL | A | B | Z | T | E | L1 | L2 |
|-------|--------|---------------|---------------|-------------|---------------|-------------|-------------|-------------|
| | (mm) | 5.00 ± 0.50 | 52.40 ± 1.50 | 1.20 (max) | 6.00 ± 0.40 | 0.80 (max) | 1.00 (max) | 1.00 (max) |
| | (inch) | 0.197 ± 0.020 | 2.063 ± 0.059 | 0.047 (max) | 0.236 ± 0.016 | 0.031 (max) | 0.039 (max) | 0.039 (max) |

| DO-15 | SYMBOL | L | W | H |
|-------|--------|----------------|---------------|---------------|
| | (mm) | 255.0 ± 5.0 | 78.0 ± 5.0 | 95.0 ± 5.0 |
| | (inch) | 10.039 ± 0.197 | 3.071 ± 0.197 | 3.740 ± 0.197 |