



# CHENMKO ENTERPRISE CO.,LTD

## GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 2.0 Amperes

**RL201GPT  
THRU  
RL207GPT**

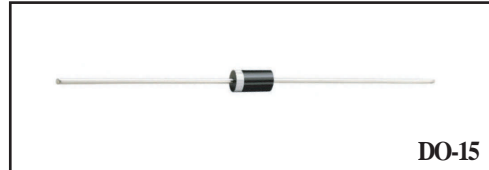
Lead free devices

### FEATURES

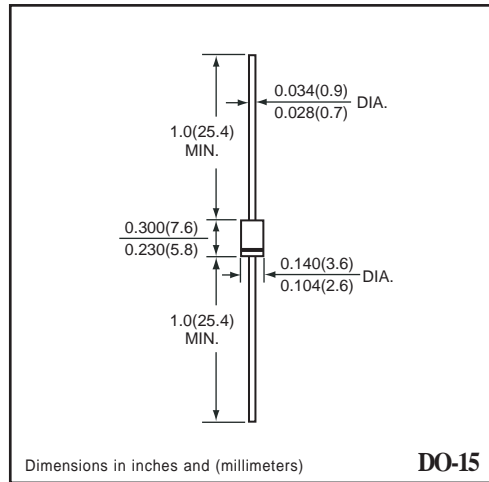
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* High reliability
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* Glass passivated junction

### MECHANICAL DATA

**Case:** JEDEC DO-15 molded plastic  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.38 gram



DO-15



DO-15

### 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 current by 20%.

#### MAXIMUM RATINGS ( At TA = 25°C unless otherwise noted )

| RATINGS   | SYMBOL   | RL201GPT    | RL202GPT | RL203GPT | RL204GPT | RL205GPT | RL206GPT | RL207GPT | UNITS  |
|---|----------|-------------|----------|----------|----------|----------|----------|----------|--------|
| Maximum Recurrent Peak Reverse Voltage  | VRRM     | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | Volts  |
| Maximum RMS Voltage   | VRMS     | 35          | 70       | 140      | 280      | 420      | 560      | 700      | Volts  |
| Maximum DC Blocking Voltage   | VDC      | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | Volts  |
| Maximum Average Forward Rectified Current at TA = 75°C  | Io       | 2.0         |          |          |          |          |          |          | Amps   |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM     | 70          |          |          |          |          |          |          | Amps   |
| Typical Junction Capacitance ( Note )   | CJ       | 20          |          |          |          |          |          |          | pF     |
| Typical Thermal Resistance  | R θJA    | 40          |          |          |          |          |          |          | °C / W |
| Operating and Storage Temperature Range   | TJ, TSTG | -65 to +175 |          |          |          |          |          |          | °C     |

#### ELECTRICAL CHARACTERISTICS ( At TA = 25°C unless otherwise noted )

| CHARACTERISTICS   | SYMBOL | RL201GPT | RL202GPT | RL203GPT | RL204GPT | RL205GPT | RL206GPT | RL207GPT | UNITS |
|---|--------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum Instantaneous Forward Voltage at 2.0 A DC   | VF     | 1.0      |          |          |          |          |          |          | Volts |
| Maximum Reverse Current at rated DC blocking Voltage per leg                                  | IR     | 5.0      |          |          |          |          |          |          | uAmps |
|   |        | 50       |          |          |          |          |          |          | uAmps |
| Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) lead length at TL = 75°C |        | 30       |          |          |          |          |          |          | uAmps |

NOTES : Measured at 1.0 MHz and applied reverse voltage of 4.0 volts

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# RATING CHARACTERISTIC CURVES ( RL201GPT THRU RL207GPT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

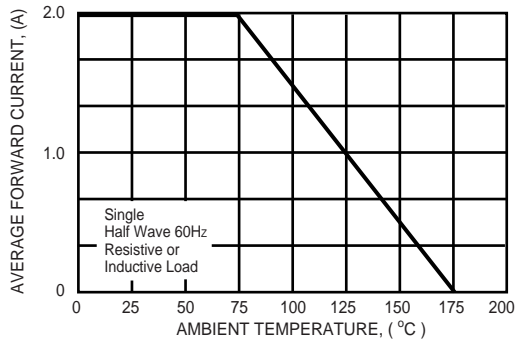


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

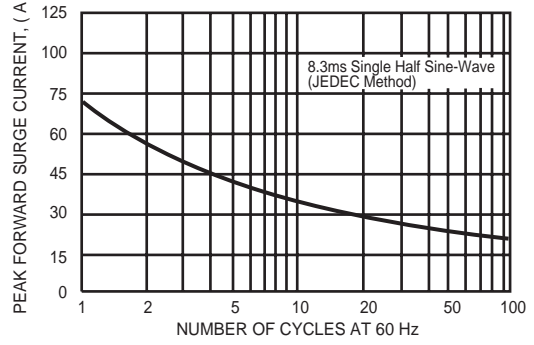


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

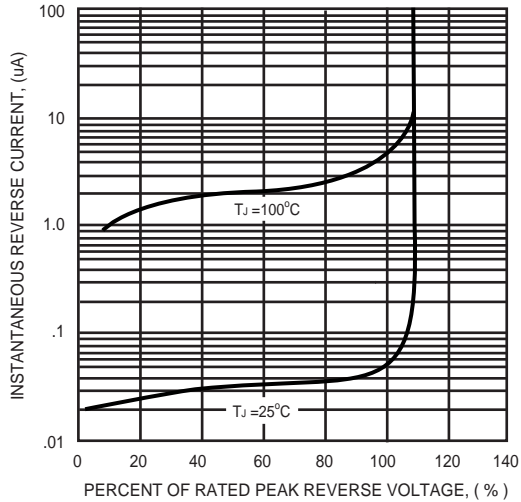


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

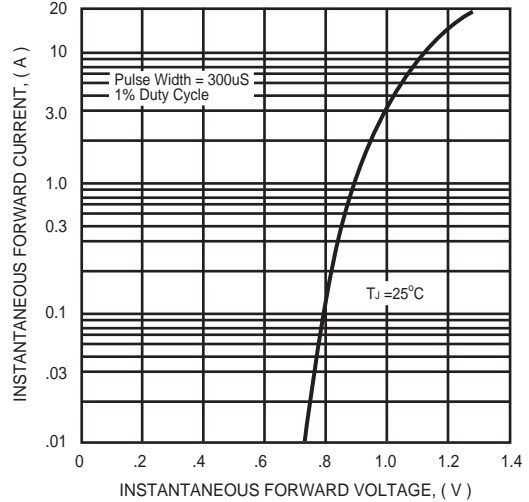


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

