

# RL201G~RL207G

Rev.B Jun.-2022



DATA SHEET

/ Revised record

| A | 2021-6-18 |   | W33            |  |  |
|---|-----------|---|----------------|--|--|
| B | 2021-6-24 | 6 | 10 390*385*205 |  |  |
|   |           |   |                |  |  |
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|   |           |   |                |  |  |
|   |           |   |                |  |  |
|   |           |   |                |  |  |

**/ Descriptions**

50V~1000V

2.0A

DO-15

Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage: 50 to1000V, Forward Current: 2.0A, DO-15 axial package.

**/ Features**

Plated axial lead, Low forward voltage drop, Low leakage current, High forward surge capability.

**/ Applications**

General purpose.

**/ Equivalent Circuit****/ Pinning**

PIN1: Cathode    PIN2:Anode

**/ Marking**

See Marking Instructions.


**/ Absolute Maximum Ratings(Ta=25 )**

| 参数<br>Parameter                                                                                   | 符号<br>Symbol    | 数值<br>Rating |        |        |        |        |        |        | 单位<br>Unit           |
|---------------------------------------------------------------------------------------------------|-----------------|--------------|--------|--------|--------|--------|--------|--------|----------------------|
|                                                                                                   |                 | RL201G       | RL202G | RL203G | RL204G | RL205G | RL206G | RL207G |                      |
| 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 at $T_a=65^{\circ}\text{C}$                             | $I_F(AV)$       | 2.0          |        |        |        |        |        |        | A                    |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$       | 50           |        |        |        |        |        |        | A                    |
| Typical Junction Capacitance <sup>1)</sup>                                                        | $C_j$           | 20           |        |        |        |        |        |        | pF                   |
| Typical Thermal Resistance <sup>2)</sup>                                                          | $R_{\theta JA}$ | 40           |        |        |        |        |        |        | $^{\circ}\text{C/W}$ |
| Operating and Storage Temperature Range                                                           | $T_j, T_{stg}$  | -55~+150     |        |        |        |        |        |        | $^{\circ}\text{C}$   |

Note:

1) Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

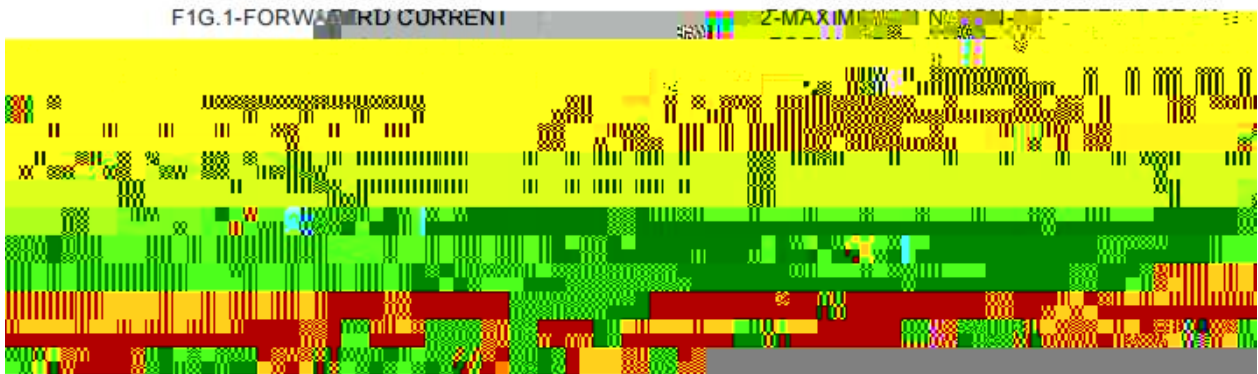
 2) Thermal Resistance from Junction to Ambient at. 1.8×1.8mm<sup>2</sup> copper pad areas.

**/ Electrical Characteristics(Ta=25 )**

| 参数<br>Parameter                                           | 符号<br>Symbol | 测试条件<br>Test Conditions   | 数值<br>Rating |        |        |        |        |        |        | 单位<br>Unit    |
|-----------------------------------------------------------|--------------|---------------------------|--------------|--------|--------|--------|--------|--------|--------|---------------|
|                                                           |              |                           | RL201G       | RL202G | RL203G | RL204G | RL205G | RL206G | RL207G |               |
| Maximum Instantaneous Forward Voltage                     | $V_F$        | $I_F=2.0\text{A}$         | 1.1          |        |        |        |        |        |        | V             |
| Maximum DC Reverse Current at Maximum DC Blocking Voltage | $I_R$        | $T_a=25^{\circ}\text{C}$  | 5.0          |        |        |        |        |        |        | $\mu\text{A}$ |
|                                                           |              | $T_a=125^{\circ}\text{C}$ | 100          |        |        |        |        |        |        | $\mu\text{A}$ |



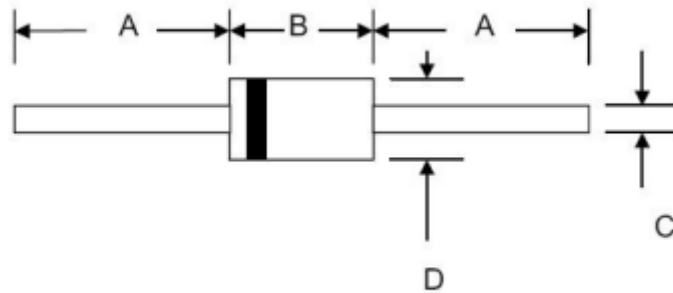
/ Electrical Characteristic Curve





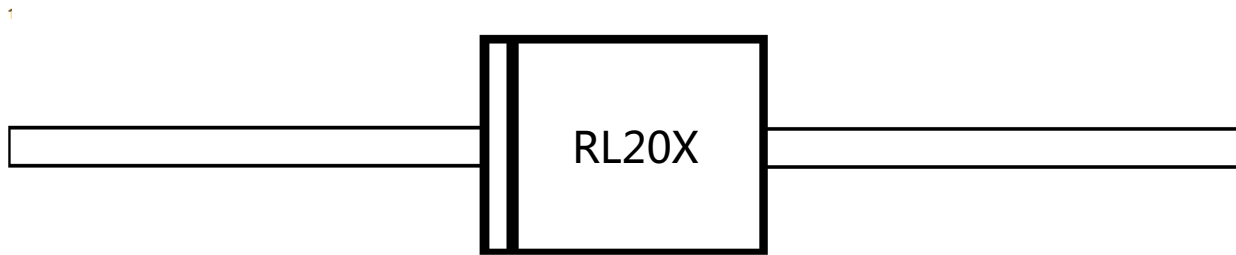
/ Package Dimensions

DO-15



| SYMBOL | Millimeters |      | Inches |       |
|--------|-------------|------|--------|-------|
|        | Min.        | Max. | Min.   | Max.  |
| A      | 25.4        |      | 1.0    |       |
| B      | 5.8         | 7.6  | 0.230  | 0.300 |
| C      | 0.68        | 0.78 | 0.027  | 0.031 |
| D      | 2.6         | 3.6  | 0.104  | 0.140 |

## / Marking Instructions



说明：

RL20X： 为型号代码

Note:

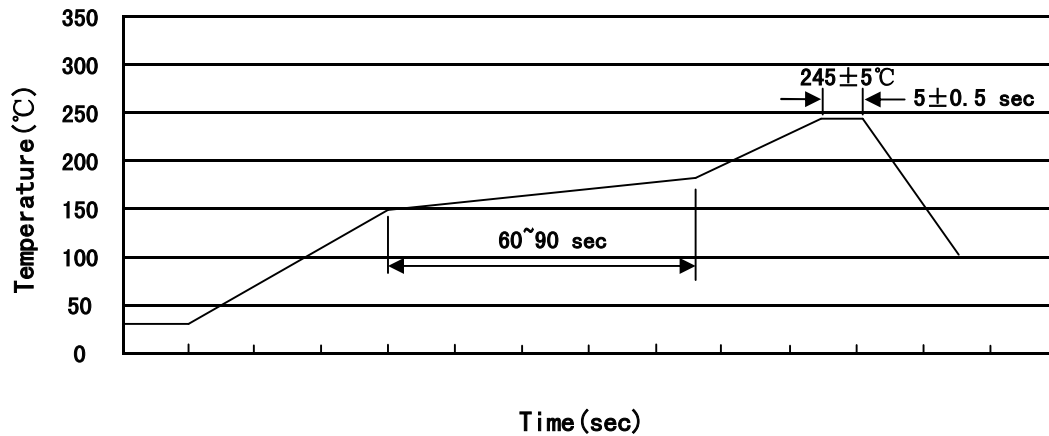
RL20X： Product Type Code

## Marking

| Type number | Marking code |
|-------------|--------------|
| RL201G      | RL201        |
| RL202G      | RL202        |
| RL203G      | RL203        |
| RL204G      | RL204        |
| RL205G      | RL205        |
| RL206G      | RL206        |
| RL207G      | RL207        |



( ) /



Note:

- |   |       |     |           |           |                                          |
|---|-------|-----|-----------|-----------|------------------------------------------|
| 1 | 150   | 180 | 60        | 90sec;    | 1.Preheating:150~180°C, Time:60~90sec.   |
| 2 | 245±5 |     |           | 5±0.5sec; | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 |       | 2   | 10°C/sec. |           | 3. Cooling Speed: 2~10°C/sec.            |

## / Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

## / Packaging SPEC.

/ REEL

| Package Type | Units           |                      |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |            |             |
|--------------|-----------------|----------------------|----------------------|----------------------------|----------------------|-----------------------------------|------------|-------------|
|              | Units/Reel<br>/ | Reels/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Reel                              | Inner Box  | Outer Box   |
| DO-15        | 3000            | 1                    | 3000                 | 10                         | 30000                | 7" ×6                             | 255X75X140 | 443X215X250 |

## / Notices