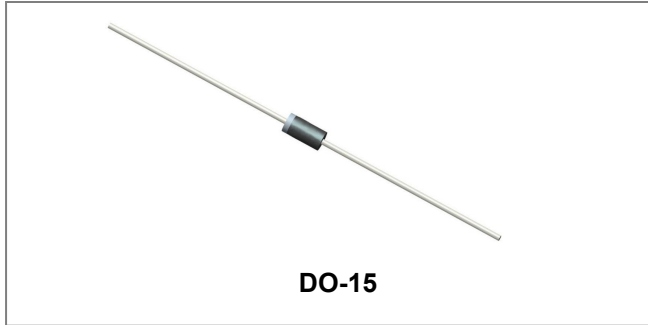


RL251G THRU RL257G GENERAL PURPOSE PLASTIC RECTIFIER



Features

- Low forward voltage drop
- Low leakage current
- High forward surge capability
- Solder Resistance 270°C / 7s, or 380°C / 3s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.40 grams

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

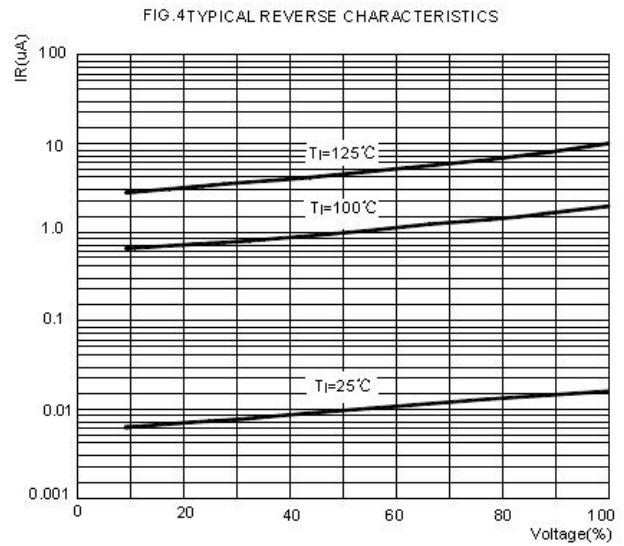
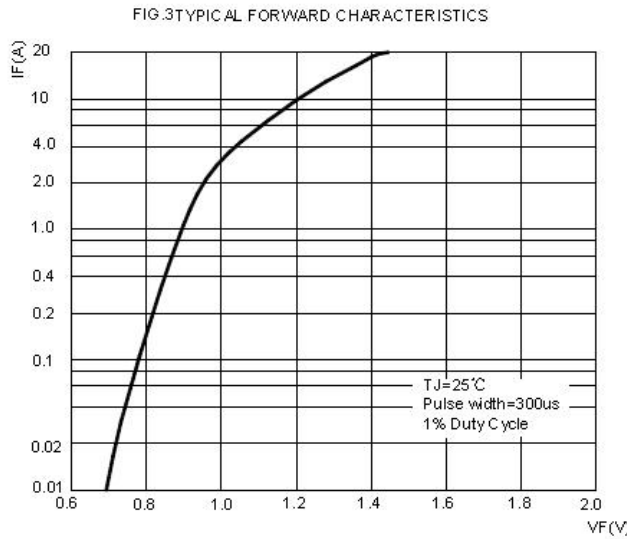
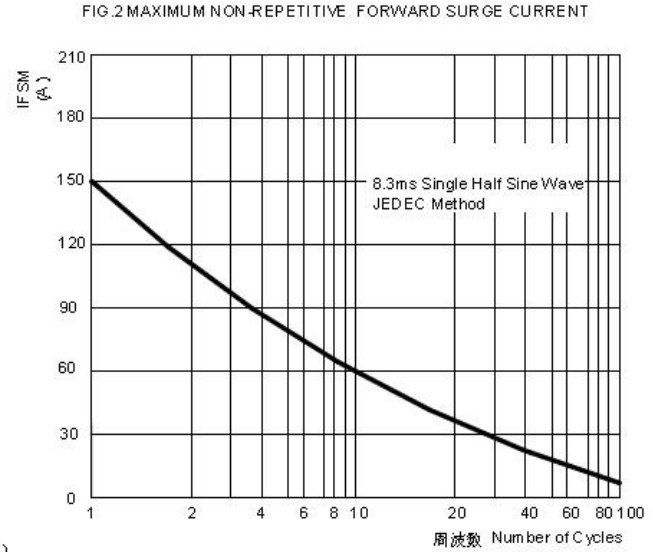
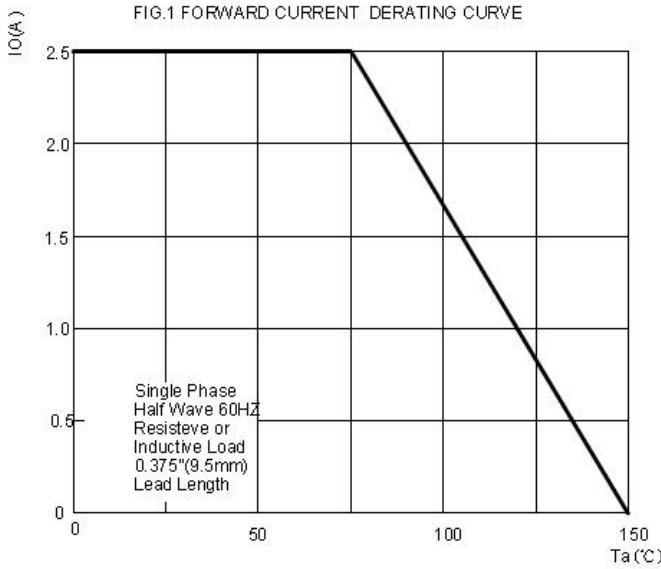
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Characteristic | Symbol | RL 251G | RL 252G | RL 253G | RL 254G | RL 255G | RL 256G | RL 257G | Units |
|---|-------------------------------------|-------------|---------|---------|---------|---------|---------|---------|-------|
| Maximum repetitive peak reverse voltage Maximum DC blocking voltage | V _{RRM} V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum average forward rectified current 0.375"(9.5mm) lead length @T _A = 75°C | I _(AV) | 2.5 | | | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 120 | | | | | | | A |
| Maximum instantaneous forward voltage at 2.5A | V _F | 1.1 | | | | | | | V |
| Maximum DC reverse current @T _A = 25°C at rated DC blocking voltage @T _A = 100°C | I _R | 2.5 50.0 | | | | | | | µA |
| Typical Junction Capacitance (Note 1) | C _J | 45.0 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 45.0 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | | °C |

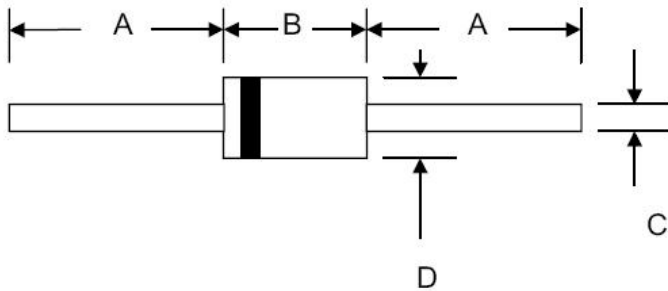
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length, P.C.B. mounted

Ratings and Characteristics Curves



Mechanical Dimensions DO-15



| SYMBOL | Millimeters | | Inches | |
|--------|-------------|------|--------|-------|
| | Min. | Max. | Min. | Max. |
| A | 25.4 | - | 1.000 | - |
| B | 5.5 | 7.62 | 0.217 | 0.300 |
| C | 0.7 | 0.9 | 0.028 | 0.034 |
| D | 2.6 | 3.6 | 0.104 | 0.140 |

Ordering Information

| Device | Package | Shipping |
|---------------|--------------------|---------------|
| RL251G-RL257G | DO-15 (Pb-Free) | 3000pcs /tape |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

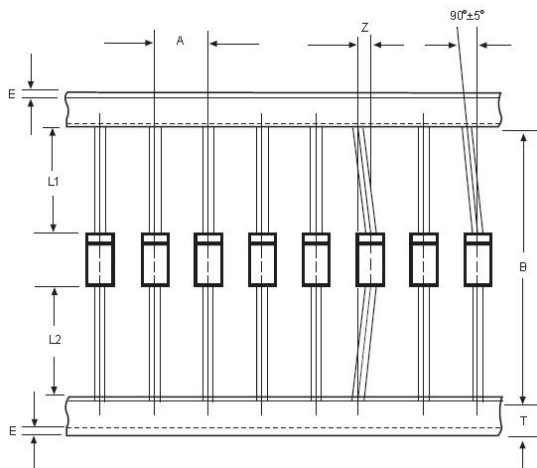


Where XXXXX is YYWWL

RL251G = Type Number
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Carrier Tape Specification DO-15



| SYMBOL | Millimeters | |
|---------|-------------|------|
| | Min. | Max. |
| A | 4.50 | 5.50 |
| B | 50.9 | 53.9 |
| Z | - | 1.20 |
| T | 5.60 | 6.40 |
| E | - | 0.80 |
| IL1-L2I | - | 1.0 |

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