



## RLT808100MG

### ABSOLUTE MAXIMUM RATINGS ( T<sub>c</sub>=25 °C )

#### Features

- Index Guided MQW Structure
- Wavelength : 808 nm (Typ.)
- Optical Power : 100 mW CW
- Threshold Current : 100 mA ( Typ. )
- Package Style : TO-18 (5.6 mmØ)

| DESCRIPTION                | SYMBOL           | RATED VALUE |
|----------------------------|------------------|-------------|
| Optical Power (mW)         | P <sub>o</sub>   | 100         |
| Operation Temperature (°C) | T <sub>op</sub>  | -10 to +50  |
| Storage Temperature (°C)   | T <sub>stg</sub> | -40 to +85  |
| LD Reverse Voltage (V)     | V <sub>LDR</sub> | 2           |
| PD Reverse Voltage (V)     | V <sub>PDR</sub> | 30          |

### OPTICAL AND ELECTRICAL CHARACTERISTICS ( T<sub>c</sub>=25 °C )

| DESCRIPTION              | SYMBOL          | MIN. | TYPICAL | MAX. | TEST CONDITION                            |
|--------------------------|-----------------|------|---------|------|---|
| Lasing Wavelength (nm)   | λ <sub>p</sub>  | 803  | 808     | 815  | P <sub>o</sub> =100mW                     |
| Threshold Current (mA)   | I <sub>th</sub> | 70   | 100     | 150  | P <sub>o</sub> =100mW                     |
| Operating Current (mA)   | I <sub>op</sub> | 200  | 250     | 350  | P <sub>o</sub> =100mW                     |
| Operating Voltage (V)    | V <sub>op</sub> | 1.8  | 2.0     | 2.5  | P <sub>o</sub> =100mW                     |
| Monitor Current (mA)     | I <sub>m</sub>  | 0.1  | .5      | 1.5  | P <sub>o</sub> =100mW, V <sub>R</sub> =5V |
| Slope Efficiency (mW/mA) | η               | 0.5  | 0.7     | 0.9  | ***                                       |
| Beam Divergence    (°)   | θ <sub>  </sub> | 3    | 5       | 8    | P <sub>o</sub> =100mW                     |
| Beam Divergence ⊥ (°)    | θ <sub>⊥</sub>  | 30   | 40      | 50   | P <sub>o</sub> =100mW                     |
| Astigmatism (μm)         | A <sub>s</sub>  | *    | 11      | *    | P <sub>o</sub> =100mW, NA=0.4             |

