



RLT995-5MG

Laser Diode Technical Data

ABSOLUTE MAXIMUM RATINGS ($T_c=25\text{ }^\circ\text{C}$)

| DESCRIPTION | SYMBOL | RATED VALUE |
|--|-----------|-------------|
| Optical Power (mW) | P_o | 5 |
| Operation Temperature ($^\circ\text{C}$) | T_{op} | -10 to +50 |
| Storage Temperature ($^\circ\text{C}$) | T_{stg} | -40 to +85 |
| LD Reverse Voltage (V) | V_{LDR} | 2 |
| PD Reverse Voltage (V) | V_{PDR} | 30 |

Features

- Index Guided MQW Structure
- Wavelength : 995 nm (Typ.)
- Optical Power : 5 mW CW
- Threshold Current : 25 mA (Typ.)
- Package Style : TO-18 (5.6 mm \varnothing)

OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_c=25\text{ }^\circ\text{C}$)

| DESCRIPTION | SYMBOL | MIN. | TYPICAL | MAX. | TEST CONDITION |
|--|----------------------|------|---------|------|---------------------------------|
| Lasing Wavelength (nm) | λ_p | 985 | 995 | 1005 | $P_o=5\text{mW}$ |
| Threshold Current (mA) | I_{th} | 20 | 25 | 45 | $P_o=5\text{mW}$ |
| Operating Current (mA) | I_{op} | 25 | 35 | 50 | $P_o=5\text{mW}$ |
| Operating Voltage (V) | V_{op} | 1.8 | 2.0 | 2.5 | $P_o=5\text{mW}$ |
| Monitor Current (mA) | I_m | 0.1 | 0.25 | 0.4 | $P_o=5\text{mW}, V_R=5\text{V}$ |
| Slope Efficiency (mW/mA) | η | 0.5 | 0.7 | 0.9 | *** |
| Beam Divergence \parallel ($^\circ$) | θ_{\parallel} | 8 | 10 | 12 | $P_o=5\text{mW}$ |
| Beam Divergence \perp ($^\circ$) | θ_{\perp} | 25 | 30 | 40 | $P_o=5\text{mW}$ |
| Astigmatism (μm) | A_s | * | 11 | * | $P_o=5\text{mW}, NA=0.4$ |

