

# ROITHNER LASERTECHNIK

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## RLT6520G TECHNICAL DATA

### High Power Visible Wavelength Laserdiode

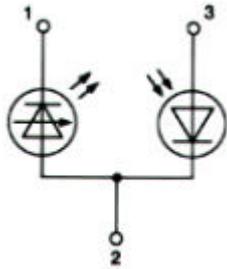
Structure: **AlGaInP**, index guided

Lasing wavelength: **650 nm**

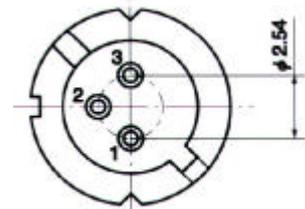
Max. optical power: **20 mW**

Package: **9mm G (or 5.6mm MG)**

#### PIN CONNECTION:



- 1) Laser diode cathode
- 2) Laser diode anode and photodiode cathode
- 3) Photodiode anode



#### Absolute Maximum Ratings (Tc=25°C)

| CHARACTERISTIC             | SYMBOL      | RATING     | UNIT |
|----------------------------|-------------|------------|------|
| Optical Output Power       | $P_o$       | 20         | mW   |
| LD Reverse Voltage         | $V_{R(LD)}$ | 2          | V    |
| PD Reverse Voltage         | $V_{R(PD)}$ | 30         | V    |
| Operation Case Temperature | $T_C$       | -10 .. +50 | °C   |
| Storage Temperature        | $T_{STG}$   | -40 .. +85 | °C   |

#### Optical-Electrical Characteristics (Tc = 25°C)

| CHARACTERISTIC       | SYMBOL      | TEST CONDITION | MIN | TYP | MAX | UNIT |
|----------------------|-------------|----------------|-----|-----|-----|------|
| Optical Output Power | $P_o$       | kink free      |     | 15  |     | mW   |
| Threshold Current    | $I_{th}$    |                | 25  | 40  | 60  | mA   |
| Operation Current    | $I_{op}$    | $P_o = 20mW$   | 40  | 60  | 70  | mA   |
| Operating Voltage    | $V_{op}$    | $P_o = 20mW$   |     | 2.5 | 2.6 | V    |
| Lasing Wavelength    | $\lambda_p$ | $P_o = 20mW$   |     | 650 | 655 | nm   |
| Beam Divergence      | $q_1$       | $P_o = 20mW$   | 6   | 9   | 16  | °    |
| Beam Divergence      | $q_2$       | $P_o = 20mW$   |     | 30  |     | °    |
| Monitor Current      | $I_m$       | $P_o = 20mW$   | 10  | 100 |     | µA   |

|             |       |                     |  |    |  |               |
|-------------|-------|---------------------|--|----|--|---------------|
| Astigmatism | $A_s$ | $P_o = 20\text{mW}$ |  | 11 |  | $\mu\text{m}$ |
|-------------|-------|---------------------|--|----|--|---------------|