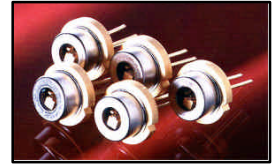


# ROITHNER LASERTECHNIK

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## RLT8350G TECHNICAL DATA



### High Power Infrared Laserdiode

Structure: **AlGaAs/GaAs** quantum well, Aperture **3 x 1.5  $\mu\text{m}^2$**

Lasing wavelength: **830 nm typ.**

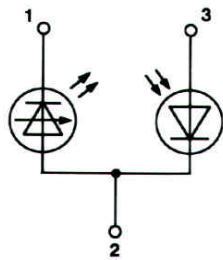
Max. optical power: **60 mW, single mode**

Package: **9 mm G**

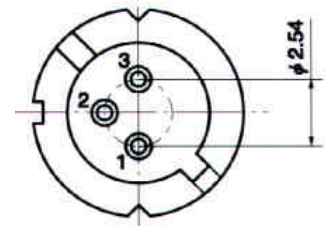
**NOTE!**  
LASERDIODE  
MUST BE COOLED!



#### PIN CONNECTION:



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



#### Maximum Ratings (Tc=25°C)

| CHARACTERISTIC        | SYMBOL      | RATING     | UNIT |
|-----------------------|-------------|------------|------|
| Optical Output Power  | $P_o$       | 60         | mW   |
| LD Reverse Voltage    | $V_{R(LD)}$ | 2          | V    |
| PD Reverse Voltage    | $V_{R(PD)}$ | 5          | V    |
| Operating Temperature | $T_c$       | -60 .. +60 | °C   |
| Storage Temperature   | $T_{STG}$   | -70 .. +85 | °C   |

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

| CHARACTERISTIC          | SYMBOL           | TEST CONDITION      | MIN | TYP  | MAX | UNIT          |
|-------------------------|------------------|---------------------|-----|------|-----|---------------|
| Optical Output Power    | $P_o$            |                     |     | 50   |     | mW            |
| Threshold Current       | $I_{th}$         |                     |     | 20   | 30  | mA            |
| Operation Current       | $I_{op}$         | $P_o = 50\text{mW}$ | 110 | 120  | 150 | mA            |
| Lasing Wavelength       | $\lambda_p$      | $P_o = 50\text{mW}$ |     | 830  | 840 | nm            |
| Beam Divergence         | $\theta_{//}$    | $P_o = 50\text{mW}$ |     | 12   |     | °             |
| Beam Divergence         | $\theta_{\perp}$ | $P_o = 50\text{mW}$ |     | 25   |     | °             |
| Differential Efficiency | $dP_o/dI_{op}$   | $P_o = 50\text{mW}$ |     | 0.75 |     | mW/mA         |
| Monitor Current         | $I_m$            | $P_o = 50\text{mW}$ |     | 250  |     | $\mu\text{A}$ |