

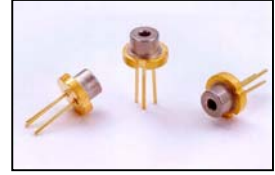
ROITHNER LASERTECHNIK

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RLT1460-5MG TECHNICAL DATA



Infrared Laser Diode

Structure: **double heterostructure**
 Lasing wavelength: **1460 nm typ.**
 Max. optical power: **5 mW**
 Package: **5.6 mm**

NOTE!

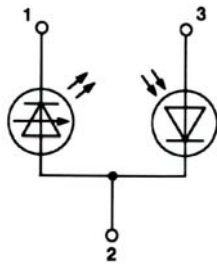
**LASERDIODE
MUST BE COOLED!**

ATTENTION

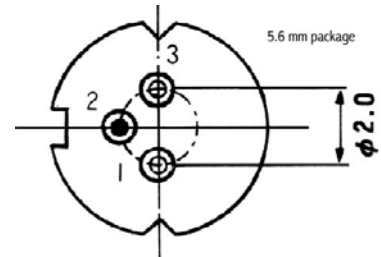
OBSERVE PRECAUTIONS
FOR HANDLING

ELECTROSTATIC SENSITIVE DEVICE

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 | 5 | mW |
| LD Reverse Voltage | $V_{R(LD)}$ | 2 | V |
| PD Reverse Voltage | $V_{R(PD)}$ | 30 | V |
| Operating Temperature | T_{op} | -10 .. +50 | °C |
| Storage Temperature | T_{stg} | -40 .. +85 | °C |

Optical-Electrical Characteristics (Tc = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT |
|-------------------------|------------------|-------------------------------------|------|------|------|-------------------------|
| Threshold Current | I_{th} | cw | - | 15 | 20 | mA |
| Operation Current | I_{op} | $P_o = 5 \text{ mW}$ | - | 35 | 40 | mA |
| Operation Voltage | V_{op} | $P_o = 5 \text{ mW}$ | 1.0 | 1.2 | 1.3 | V |
| Lasing Wavelength | λ_p | $P_o = 5 \text{ mW}$ | 1450 | 1460 | 1470 | nm |
| Beam Divergence | $\theta_{//}$ | $P_o = 5 \text{ mW}$ | 8 | 10 | 15 | ° |
| Beam Divergence | θ_{\perp} | $P_o = 5 \text{ mW}$ | 25 | 30 | 40 | ° |
| Differential Efficiency | η | $P_o = 5 \text{ mW}$ | - | 200 | 300 | $\mu\text{W}/\text{mA}$ |
| Monitor Current | I_m | $P_o = 5 \text{ mW}, V_r=5\text{V}$ | 250 | 350 | 650 | μA |