

ROITHNER LASERTECHNIK

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RLT7610MG TECHNICAL DATA



High Power Infrared Laserdiode

Structure: index guided single transverse mode

Lasing wavelength: 760 nm typ.

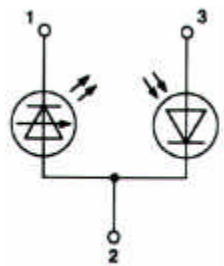
Output power: 10 mW cw

Package: 5.6 mm, TO-18

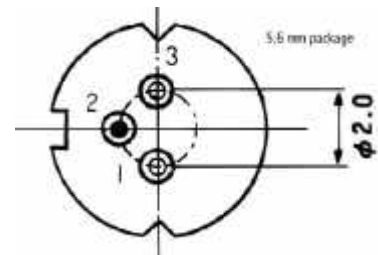


NOTE!
 LASERDIODE
 MUST BE COOLED!

PIN CONNECTION:



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



Maximum Ratings (T_c = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|----------------------------|--------------------|------------|------|
| Optical Output Power | P _o | 10 | mW |
| LD Reverse Voltage | V _{R(LD)} | 2 | V |
| PD Reverse Voltage | V _{R(PD)} | 30 | V |
| Operation Case Temperature | T _C | -10 .. +60 | °C |
| Storage Temperature | T _{STG} | -40 .. +85 | °C |

Optical-Electrical Characteristics (T_c = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT |
|-------------------|-----------------|------------------------|-----|------|-----|-------|
| Threshold Current | I _{th} | cw | | 13 | 20 | mA |
| Operation Current | I _{op} | P _o = 10 mW | | 30 | 35 | mA |
| Operating Voltage | V _{op} | P _o = 10 mW | 1.8 | 1.9 | 2.0 | V |
| Lasing Wavelength | λ _p | P _o = 10 mW | | 760 | 766 | nm |
| Beam Divergence | θ _{//} | P _o = 10 mW | 7 | 10 | 12 | ° |
| Beam Divergence | θ _⊥ | P _o = 10 mW | 30 | 33 | 38 | ° |
| Slope Efficiency | η | cw | 0.5 | 0.65 | 1 | mW/mA |
| Monitor Current | I _m | P _o = 10 mW | 300 | 400 | 500 | μA |