

ROITHNER LASERTECHNIK

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RLT1550-5G TECHNICAL DATA



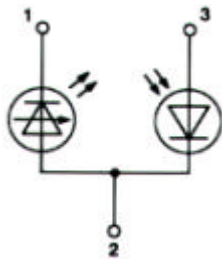
Infrared Laserdiode

Structure: **GaInAsP/InP, SQW structure**
 Lasing wavelength: **single mode 1550 nm typ.**
 Typ. optical power: **5 mW**
 Package: **9 mm (SOT-148)**

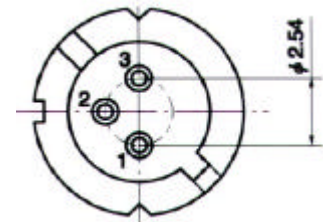
NOTE!
 LASERDIODE
 MUST BE COOLED!



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 |
|-----------------------|-------------|------------|------|
| Maximum LD current | I_f | 100 | mA |
| Optical Output Power | P_o | 15 | mW |
| LD Reverse Voltage | $V_{R(LD)}$ | 1.5 | V |
| PD Reverse Voltage | $V_{R(PD)}$ | 6 | V |
| Operating Temperature | T_C | -20 .. +40 | °C |
| Storage Temperature | T_{STG} | -40 .. +85 | °C |

Optical-Electrical Characteristics (Tc = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT |
|----------------------|------------------|----------------------|------|-------|------|-----------------|
| Aperture | A | | | 1 x 5 | | μm^2 |
| Optical Output Power | P_o | cw | | 5 | 15 | mW |
| Threshold Current | I_{th} | cw | 25 | 45 | | mA |
| Operation Current | I_{op} | $P_o = 5 \text{ mW}$ | | 60 | 75 | mA |
| Forward Voltage | U_f | $P_o = 5 \text{ mW}$ | | 2 | | V |
| Lasing Wavelength | λ_p | $P_o = 5 \text{ mW}$ | 1520 | 1550 | 1580 | nm |
| Beam Divergence | $\theta_{//}$ | $P_o = 5 \text{ mW}$ | | 25 | | ° |
| Beam Divergence | θ_{\perp} | $P_o = 5 \text{ mW}$ | | 40 | | ° |
| Monitor Current | I_m | $P_o = 5 \text{ mW}$ | > 20 | 100 | | μA |