

# ROITHNER LASERTECHNIK

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## RLT6505G TECHNICAL DATA

### Visible Wavelength Laserdiode

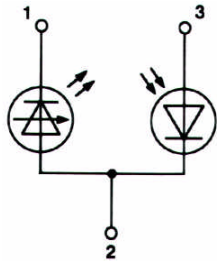
Structure: **AlGaInP**, index guided, single transverse mode

Lasing wavelength: **650 nm**

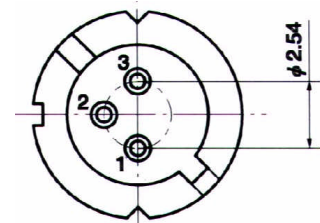
Max. optical power: **5 mW**

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

#### PIN CONNECTION:



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



#### Maximum Ratings (T<sub>c</sub>=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P <sub>o</sub>	5	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operation Case Temperature	T <sub>C</sub>	-10 .. +40	°C
Storage Temperature	T <sub>STG</sub>	-40 .. +85	°C

#### Optical-Electrical Characteristics (T<sub>c</sub> = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P <sub>o</sub>	kink free			5	mW
Threshold Current	I <sub>th</sub>		20	30	40	mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> =5mW		45	70	mA
Operating Voltage	V <sub>op</sub>	P <sub>o</sub> =5mW		2.2	2.7	V
Lasing Wavelength	λ <sub>p</sub>	P <sub>o</sub> =5mW		650	655	nm
Beam Divergence	q <sub>1</sub>	P <sub>o</sub> =5mW	5	8	11	°
Beam Divergence	q <sub>2</sub>	P <sub>o</sub> =5mW	25	31	37	°
Astigmatism	As	P <sub>o</sub> =5mW, NA=0.4		11		μm
Monitor Current	I <sub>m</sub>	P <sub>o</sub> =5mW, V <sub>r</sub> =5V		10		μA