

# ROITHNER LASERTECHNIK

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## RLT6505MG TECHNICAL DATA



### Visible Wavelength Laserdiode

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

Lasing wavelength: **650 nm**

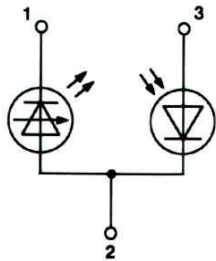
Max. optical power: **5 mW**

Package: **5.6 mm**

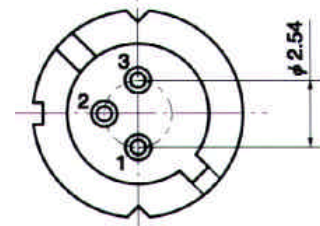


**NOTE!**  
 LASERDIODE  
 MUST BE COOLED!

#### 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	$P_o$	5	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	$T_c$	-10 .. +40	°C
Storage Temperature	$T_{STG}$	-40 .. +85	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	$P_o$	kink free			5	mW
Threshold Current	$I_{th}$	cw	20	30	40	mA
Operation Current	$I_{op}$	$P_o = 5 \text{ mW}$		45	70	mA
Operating Voltage	$V_{op}$	$P_o = 5 \text{ mW}$		2.2	2.7	V
Lasing Wavelength	$\lambda_p$	$P_o = 5 \text{ mW}$		650	655	nm
Beam Divergence	$\theta_{//}$	$P_o = 5 \text{ mW}$	5	8	11	°
Beam Divergence	$\theta_{\perp}$	$P_o = 5 \text{ mW}$	25	31	37	°
Astigmatism	As	$P_o = 5 \text{ mW}$ , NA=0.4		11		$\mu\text{m}$
Monitor Current	$I_m$	$P_o = 5 \text{ mW}$ , $V_f = 5 \text{ V}$		10	200	$\mu\text{A}$