

ROITHNER LASERTECHNIK

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RLT6505MG

TECHNICAL DATA



Visible Wavelength Laserdiode

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

Lasing wavelength: **650 nm**

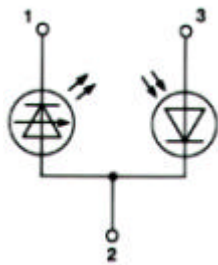
Max. optical power: **5 mW**

Package: **5.6 mm**

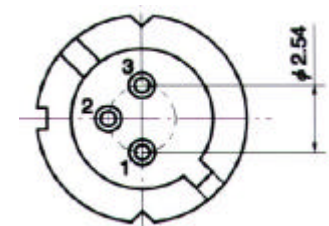


NOTE!
LASERDIODE
MUST BE COOLED!

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	λ_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		μm
Monitor Current	I_m	$P_o = 5 \text{ mW}$, $V_f = 5 \text{ V}$		10	200	μA