

# ROITHNER LASERTECHNIK

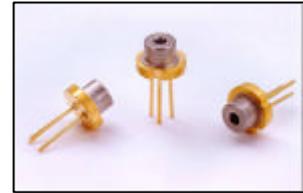
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## RLT6630MG

### TECHNICAL DATA



## High Power Visible Wavelength Laserdiode

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

Lasing wavelength: **658 nm typ.**

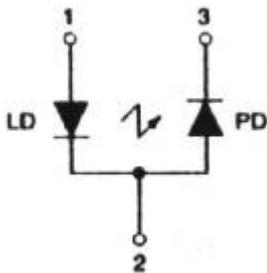
Max. optical power: **30 mW cw**

Package: **5.6 mm**

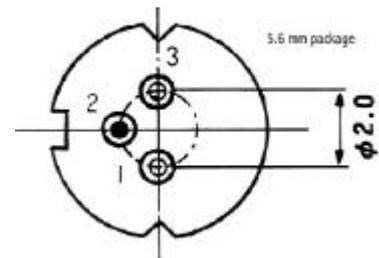
**NOTE!**  
LASERDIODE  
MUST BE COOLED!



### PIN CONNECTION:



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



### Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power cw	$P_o$	35	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	$T_{STG}$	-10 .. +100	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	$P_o$	kink free		30	50 *)	mW
Threshold Current	$I_{th}$	cw		45	70	mA
Operation Current	$I_{op}$	$P_o = 30$ mW		85	120	mA
Operating Voltage	$V_{op}$	$P_o = 30$ mW		2.7	3.2	V
Lasing Wavelength	$\lambda_p$	$P_o = 30$ mW	645	658	666	nm
Beam Divergence	$\theta_{//}$	$P_o = 30$ mW	7	8.5	11	°
Beam Divergence	$\theta_{\perp}$	$P_o = 30$ mW	17	22	26	°
Slope efficiency	$\eta$	$P_o = 30$ mW		0.8		mW/mA
Monitor Current	$I_m$	$P_o = 30$ mW, $V_r=5$ V	0.05	0.3	2.5	mA

\*) Note: Duty cycle less than 50%, pulse width less than 1µs