

# ROITHNER LASERTECHNIK

A-1040 VIENNA, SCHOENBRUNNER STRASSE 7, AUSTRIA

TEL: +43 -1- 586 52 43-0 FAX: +43 -1- 586 52 43-44

e-mail: office@roithner-laser.com http://www.roithner-laser.com

## RLT6405G TECHNICAL DATA

### Short Wavelength Laserdiode

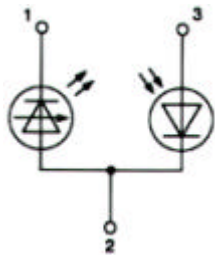
Structure: **AlGaInP**, index guided

Lasing wavelength: **640 nm**

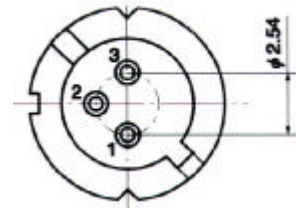
Max. optical power: **5 mW**

Package: **9 mm**

#### 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
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	$I_{th}$		35	45	55	mA
Operation Current	$I_{op}$	$P_o = 5mW$	45	55	70	mA
Operating Voltage	$V_{op}$	$P_o = 5mW$	2.0	2.4		V
Lasing Wavelength	$\lambda_p$	$P_o = 5mW$		640	645	nm
Beam Divergence	$\theta_{\parallel}$	$P_o = 5mW$	8	10	11	°
Beam Divergence	$\theta_{\perp}$	$P_o = 5mW$	25	31	40	°
Monitor Current	$I_m$	$P_o = 5mW, V_r = 5V$	5	10	20	$\mu A$
Slope Efficiency	$\eta$	mW/mA	0.1	0.3	0.5	
Astigmatism	$A_s$	$P_o = 5mW$		11		$\mu m$