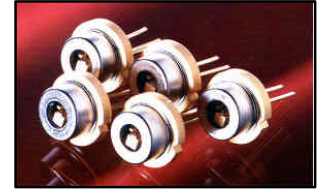


ROITHNER LASERTECHNIK

A-1040 WIEN, FLEISCHMANNGASSE 9
TEL: +43 -1- 586 52 43 FAX: +43 -1- 586 41 43
e-mail: rlt@mcb.at <http://www.roithner.mcb.at>

RLT6550G TECHNICAL DATA



High Power Visible Laserdiode

Structure: **High Efficiency MOVCD Quantum Well Design**

Lasing wavelength: **650 nm typ.**

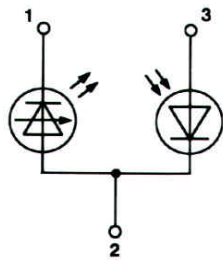
Output power: **50 mW**

Package: **9 mm**

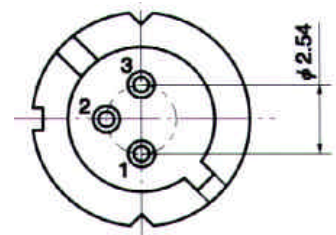


NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Absolute Maximum Ratings (T_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	60	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _c	-10 .. +40	°C
Storage Temperature	T _{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	cw operation		50		mW
Threshold Current	I _{th}	cw operation		80	130	mA
Operation Current	I _{op}	P _o = 50 mW		180	250	mA
Operation Voltage	V _{op}	P _o = 50 mW	2.0	2.2	2.5	V
Slope Efficiency	η	cw operation	0.4	0.7	1.0	W/A
Lasing Wavelength	λ	P _o = 50 mW		650	665	nm
Beam Divergence	θ _{//}	P _o = 50 mW	5	7	14	°
Beam Divergence	θ _⊥	P _o = 50 mW	30	38	40	°
Lasing Aperture	A	P _o = 50 mW		20x1		μm ²
Monitor Current	I _m	P _o = 50 mW		0.5	2.0	mA