

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>

S6510MG TECHNICAL DATA



Visible Wavelength Laserdiode

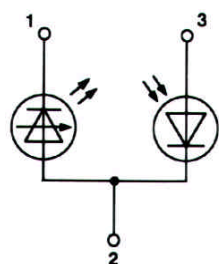
Structure **InGaAlP**, index guided single transverse mode

Lasing wavelength **655nm typ.**

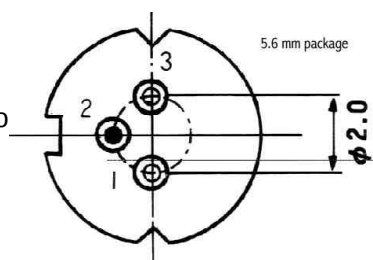
Output power **10 mW, CW**

Package **5.6 mm MG, TO-18**

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	10	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}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I_{th}			15	20	mA
Operation Current	I_{op}	$P_o = 10\text{mW}$		26	40	mA
Operating Voltage	V_{op}	$P_o = 10\text{mW}$		2.2	2.6	V
Lasing Wavelength	λ_p	$P_o = 10\text{mW}$	650	655	660	nm
Beam Divergence	$\theta_{//}$	$P_o = 10\text{mW}$	5	7	9	°
Beam Divergence	$\theta_{\perp}$	$P_o = 10\text{mW}$	30	32	38	°
Slope Efficiency	η		0.5	0.7	1	mW/mA
Monitor Current	I_m	$P_o = 10\text{mW}$	50	200	500	μA