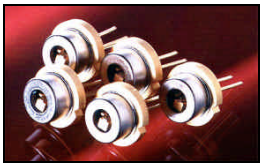
ROITHNER LASERTECHNIK

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

RLT9820G TECHNICAL DATA

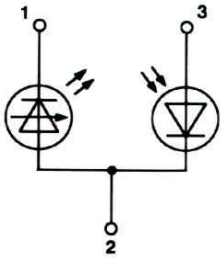


High Power Infrared Laserdiode

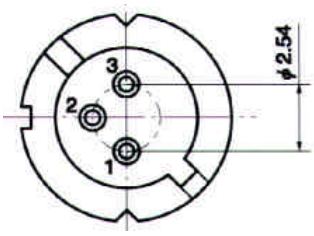
Structure: **GaAlAs double heterostructure**
Lasing wavelength: **980 nm typ.**
Max. optical power: **20 mW, multimode**
Package: **9 mm**

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	25	mW
LD Reverse Voltage	$V_{R(LD)}$	1.5	V
PD Reverse Voltage	$V_{R(PD)}$	6	V
Operating Temperature	T_C	-10 .. +50	°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			20		mW
Threshold Current	I_{th}			25	30	mA
Operation Current	I_{op}	P_o = 20 mW	60	75	100	mA
Lasing Aperture	A			1x15		µm²
Lasing Wavelength	λ_p	P_o = 20 mW	970	980	990	nm
Beam Divergence	$\theta_{//}$	P_o = 20 mW		20	25	°
Beam Divergence	$\theta_{\perp}$	P_o = 20 mW		45	50	°
Differential Efficiency	dP_o/dI_{op}	P_o = 20 mW	0.4	0.7	1.0	mW/mA
Monitor Current	I_m	P_o = 20 mW	150	350	1200	µA