

ROITHNER LASERTECHNIK

A-1040 WIEN, FLEISCHMANNGASSE 9

TEL: +43 -1- 586 52 43 FAX: +43 -1- 586 41 43

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

RLT9810MG-N

TECHNICAL DATA



High Power Infrared Laserdiode

Structure: index guided, single transverse mode

Lasing wavelength: 980 nm typ.

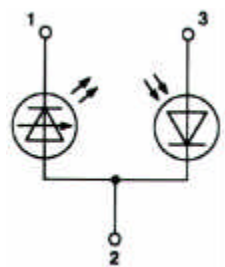
Output power: 10 mW cw

Package: 5.6 mm, TO-18

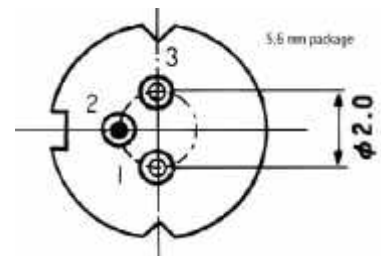


NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Maximum Ratings (T_c = 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 (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I _{th}	cw	15	20	27	mA
Operation Current	I _{op}	P _o = 10 mW		45	60	mA
Operating Voltage	V _{op}	P _o = 10 mW	1.4	1.5	1.7	V
Lasing Wavelength	λ _p	P _o = 10 mW	970	980	983	nm
Beam Divergence	θ _{//}	P _o = 10 mW	7	8	12	°
Beam Divergence	θ _⊥	P _o = 10 mW	30	33	38	°
Slope Efficiency	η	cw	0.5	0.7	1	mW/mA
Monitor Current	I _m	P _o = 10 mW		0.75	1	mA