

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

RLT8320MG TECHNICAL DATA



High Power Infrared Laserdiode

Structure: **AlGaAs double heterostructure**

Lasing wavelength: **830 nm typ.**

Max. optical power: **20 mW**

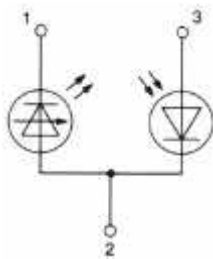
Package: **5.6 mm**

NOTE!

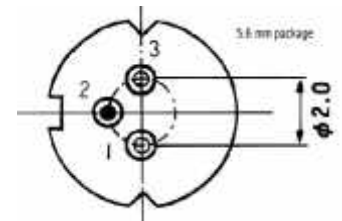
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



- 1) Laserdiode cathode
- 2) Laserdiode anode and photodiode cathode
- 3) Photodiode anode



Maximum Ratings (T_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	20	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _{op}	-10 .. +50	°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		35	45	mA
Operation Current	I _{op}	P _o = 20 mW	45	60	80	mA
Operation Voltage	V _{op}	P _o = 20 mW	2.0	2.3	2.6	V
Lasing Wavelength	λ _p	P _o = 20 mW	820	830	840	nm
Beam Divergence	θ _{//}	P _o = 20 mW	8	10	11	°
Beam Divergence	θ _⊥	P _o = 20 mW	25	31	40	°
Astigmatism	A _s	P _o = 20 mW		11		μm
Monitor Current	I _m	P _o = 20 mW, V _r =5V	150	250	350	μA