

# ROITHNER LASERTECHNIK

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## RLT8320MG TECHNICAL DATA



### High Power Infrared Laserdiode

Structure: **AlGaAs double heterostructure**

Lasing wavelength: **830 nm typ.**

Max. optical power: **20 mW**

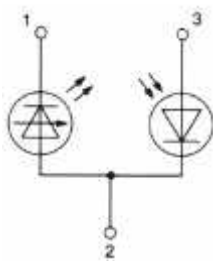
Package: **5.6 mm**

**NOTE!**

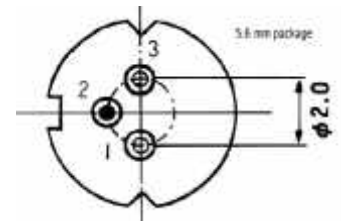
LASERDIODE  
MUST BE COOLED!



### PIN CONNECTION:



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



### Maximum Ratings (Tc=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 (Tc = 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	$\lambda_p$	$P_o = 20$ mW	820	830	840	nm
Beam Divergence	$\theta_{//}$	$P_o = 20$ mW	8	10	11	°
Beam Divergence	$\theta_{\perp}$	$P_o = 20$ mW	25	31	40	°
Astigmatism	$A_s$	$P_o = 20$ mW		11		μm
Monitor Current	$I_m$	$P_o = 20$ mW, $V_r=5$ V	150	250	350	μA