

# ROITHNER LASERTECHNIK

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## RLT1060-10MG TECHNICAL DATA



### Infrared Laser Diode

Structure: **double heterostructure**

Lasing wavelength: **1063 nm typ.**

Optical power: **10 mW**

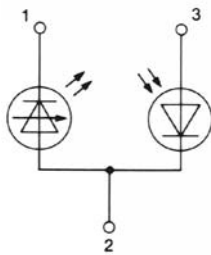
Package: **5.6 mm**

**NOTE!**

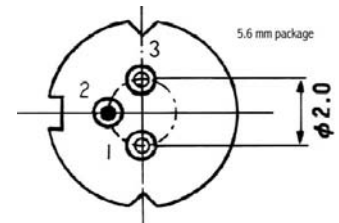
LASERDIODE  
MUST BE COOLED!



### PIN CONNECTION:



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



### Absolute Maximum Ratings (T<sub>c</sub>=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P <sub>o</sub>	12	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operating Temperature	T <sub>op</sub>	-10 .. +40	°C
Storage Temperature	T <sub>stg</sub>	-40 .. +85	°C

### Optical-Electrical Characteristics (T<sub>c</sub> = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I <sub>th</sub>	cw	7	10	16	mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> = 10 mW	30	33	40	mA
Operation Voltage	V <sub>op</sub>	P <sub>o</sub> = 10 mW	1.7	1.8	2.0	V
Lasing Wavelength	λ <sub>p</sub>	P <sub>o</sub> = 10 mW	1058	1063	1070	nm
Beam Divergence	θ <sub>//</sub>	P <sub>o</sub> = 10 mW	8	10	15	°
Beam Divergence	θ <sub>⊥</sub>	P <sub>o</sub> = 10 mW	25	30	40	°
Differential Efficiency	η	P <sub>o</sub> = 10 mW		450	600	μW/mA
Monitor Current	I <sub>m</sub>	P <sub>o</sub> = 10 mW, V <sub>r</sub> =5V	150	200	300	μA