

# **ROITHNER LASERTECHNIK**

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## **RLT9005MG**

### **TECHNICAL DATA**



### **Infrared Laserdiode**

Structure: **index guided single transverse mode**

Lasing wavelength: **900 nm typ.**

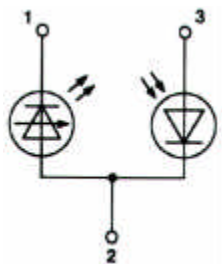
Output power: **5 mW cw**

Package: **5.6 mm, TO-18**

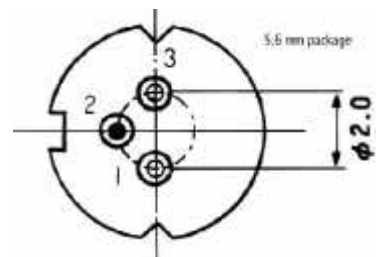


**NOTE!**  
LASERDIODE  
MUST BE COOLED!

### **PIN CONNECTION:**



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



### **Maximum Ratings (Tc = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P <sub>o</sub>	7	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operation Case Temperature	T <sub>C</sub>	-10 .. +60	°C
Storage Temperature	T <sub>STG</sub>	-40 .. +85	°C

### **Optical-Electrical Characteristics (Tc = 25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I <sub>th</sub>	cw		30	40	mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> = 5 mW		40	60	mA
Operating Voltage	V <sub>op</sub>	P <sub>o</sub> = 5 mW		1.6	1.8	V
Lasing Wavelength	λ <sub>p</sub>	P <sub>o</sub> = 5 mW	895	900	910	nm
Beam Divergence	θ <sub>//</sub>	P <sub>o</sub> = 5 mW	7	8	12	°
Beam Divergence	θ <sub>⊥</sub>	P <sub>o</sub> = 5 mW	30	33	38	°
Slope Efficiency	η	cw	0.5	0.7	1	mW/mA
Monitor Current	I <sub>m</sub>	P <sub>o</sub> = 5 mW	600	1200	2000	μA