

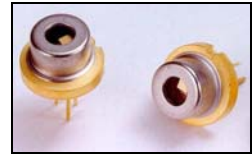
# ROITHNER LASERTECHNIK GmbH

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## RLT9810GS TECHNICAL DATA



### Infrared Laser Diode

Lasing wavelength: **980 nm**

Optical power: **10 mW**

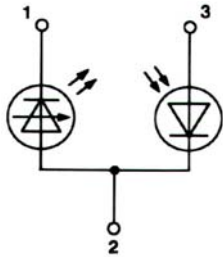
Package: **9 mm**

**NOTE!**  
LASER DIODE  
MUST BE COOLED!

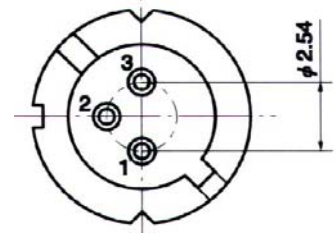


**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC SENSITIVE DEVICE

### PIN CONNECTION:



- 1) Laser diode cathode
- 2) Laser diode 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>	0.5	V
PD Reverse Voltage	V <sub>R(PD)</sub>	5	V
Operation Case Temperature	T <sub>C</sub>	-0 .. +40	°C
Storage Temperature	T <sub>STG</sub>	-20 .. +70	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P <sub>o</sub>	cw		10		mW
Threshold Current	I <sub>th</sub>	cw		50	75	mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> = 10 mW		150	190	mA
Operating Voltage	V <sub>op</sub>	P <sub>o</sub> = 10 mW	1.4	1.5	1.8	V
Lasing Wavelength	λ	P <sub>o</sub> = 10 mW	970	980	990	nm
Beam Divergence	θ <sub>∥</sub>	P <sub>o</sub> = 10 mW	6	8	12	°
Beam Divergence	θ <sub>⊥</sub>	P <sub>o</sub> = 10 mW	25	30	35	°
Monitor Current	I <sub>m</sub>	P <sub>o</sub> = 10 mW		1.0	1.2	mA