

# ROITHNER LASERTECHNIK

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## RLT9250G

### TECHNICAL DATA



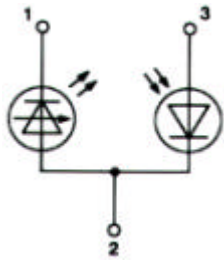
## High Power Infrared Laserdiode

Structure: **AlGaAs/GaAs quantum well**  
 Lasing wavelength: **915 nm typ., singlemode**  
 Max. optical power: **55 mW, 1.5 x 3 μm<sup>2</sup> aperture**  
 Package: **9 mm**

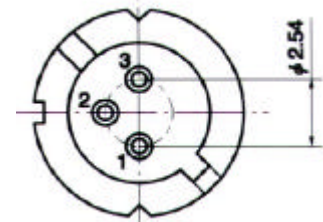
**NOTE!**  
 LASERDIODE  
 MUST BE COOLED!



### PIN CONNECTION:



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



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P <sub>o</sub>	55	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>C</sub>	-60 .. +60	°C
Storage Temperature	T <sub>STG</sub>	-70 .. +85	°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>			50		mW
Threshold Current	I <sub>th</sub>			35		mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> = 50 mW		130	160	mA
Operation Voltage	U <sub>op</sub>	P <sub>o</sub> = 50 mW		2.4		V
Lasing Wavelength	λ <sub>p</sub>	P <sub>o</sub> = 50 mW	910	915	920	nm
Beam Divergence	θ <sub>∥</sub>	P <sub>o</sub> = 50 mW	8	10	12	°
Beam Divergence	θ <sub>⊥</sub>	P <sub>o</sub> = 50 mW	25	30	35	°
Differential Efficiency	dP <sub>o</sub> /dI <sub>op</sub>	P <sub>o</sub> = 50 mW		0.7		mW/mA
Monitor Current	I <sub>m</sub>	P <sub>o</sub> = 50 mW	0.07	0.4	1.3	mA