

# ROITHNER LASERTECHNIK

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## RLT904-20G TECHNICAL DATA



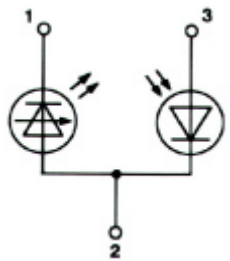
### High Power Infrared Laserdiode

Structure: **GaAlAs double heterostructure**  
 Lasing wavelength: **904 nm typ., singlemode**  
 Max. optical power: **20 mW**  
 Package: **9 mm**

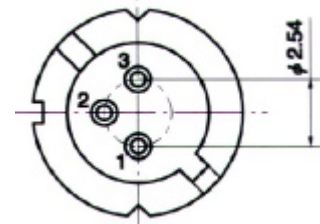
**NOTE!**  
 LASERDIODE  
 MUST BE COOLED!



#### 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>	25	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
Threshold Current	I <sub>th</sub>	cw	120	140	160	mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> = 20 mW		175	190	mA
Operation Voltage	U <sub>op</sub>	P <sub>o</sub> = 20 mW		2.2		V
Lasing Wavelength	λ <sub>p</sub>	P <sub>o</sub> = 20 mW	890	904	910	nm
Beam Divergence	θ <sub>//</sub>	P <sub>o</sub> = 20 mW	7	10	13	°
Beam Divergence	θ <sub>⊥</sub>	P <sub>o</sub> = 20 mW	15	30	35	°
Monitor Current	I <sub>m</sub>	P <sub>o</sub> = 20 mW	0.6	1	1.2	mA