

# ROITHNER LASERTECHNIK

A-1040 WIEN, FLEISCHMANNGASSE 9  
 TEL: +43 -1- 586 52 43 FAX: +43 -1- 586 41 43  
 e-mail: office@roithner-laser.com http://www.roithner-laser.com

## RLT904-30G TECHNICAL DATA



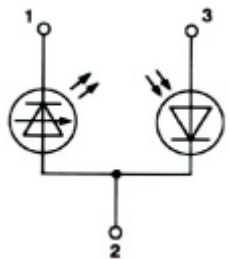
### High Power Infrared Laserdiode

Structure: **GaAlAs double heterostructure**  
 Lasing wavelength: **904 nm typ., singlemode**  
 Max. optical power: **30 mW**  
 Package: **9 mm**

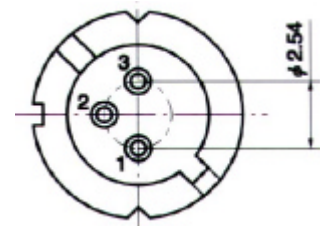
**NOTE!**  
 LASERDIODE  
 MUST BE COOLED!



#### PIN CONNECTION:



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



#### Absolute Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	$P_o$	35	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operating Temperature	$T_C$	-60 .. +60	°C
Storage Temperature	$T_{STG}$	-70 .. +85	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	$I_{th}$	cw	120	140	160	mA
Operation Current	$I_{op}$	$P_o = 30 \text{ mW}$		165	180	mA
Operation Voltage	$U_{op}$	$P_o = 30 \text{ mW}$		2.2		V
Lasing Wavelength	$\lambda_p$	$P_o = 30 \text{ mW}$	890	904	910	nm
Beam Divergence	$\theta_{//}$	$P_o = 30 \text{ mW}$	7	10	13	°
Beam Divergence	$\theta_{\perp}$	$P_o = 30 \text{ mW}$	15	30	35	°
Monitor Current	$I_m$	$P_o = 30 \text{ mW}$	0.6	1	1.2	mA