

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

RLT904-20G TECHNICAL DATA



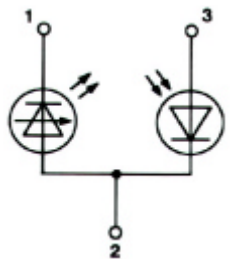
High Power Infrared Laserdiode

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

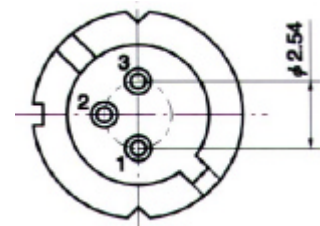
NOTE!
 LASERDIODE
 MUST BE COOLED!



PIN CONNECTION:



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



Absolute Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	25	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}	$P_o = 20 \text{ mW}$		175	190	mA
Operation Voltage	U_{op}	$P_o = 20 \text{ mW}$		2.2		V
Lasing Wavelength	λ_p	$P_o = 20 \text{ mW}$	890	904	910	nm
Beam Divergence	$\theta_{//}$	$P_o = 20 \text{ mW}$	7	10	13	°
Beam Divergence	θ_{\perp}	$P_o = 20 \text{ mW}$	15	30	35	°
Monitor Current	I_m	$P_o = 20 \text{ mW}$	0.6	1	1.2	mA