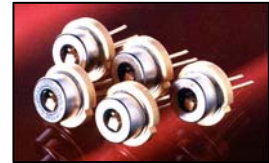




RLT9820G

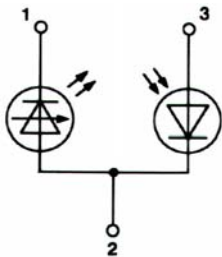
TECHNICAL DATA



High Power Infrared Laserdiode

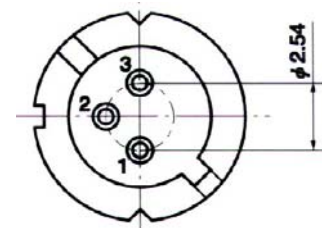
Structure: **GaAlAs double heterostructure**
 Lasing wavelength: **980 nm typ.**
 Max. optical power: **20 mW, multimode**
 Package: **9 mm**

NOTE!
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:

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



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	25	mW
LD Reverse Voltage	$V_{R(LD)}$	1.5	V
PD Reverse Voltage	$V_{R(PD)}$	6	V
Operating Temperature	T_C	-10 .. +50	°C
Storage Temperature	T_{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	cw		20		mW
Threshold Current	I_{th}	cw		25	30	mA
Operation Current	I_{op}	$P_o = 20 \text{ mW}$	60	75	100	mA
Lasing Aperture	A			1x15		μm^2
Lasing Wavelength	λ_p	$P_o = 20 \text{ mW}$	970	980	990	nm
Beam Divergence	$\theta_{//}$	$P_o = 20 \text{ mW}$		20	25	°
Beam Divergence	θ_{\perp}	$P_o = 20 \text{ mW}$		45	50	°
Differential Efficiency	dP_o/dI_{op}	$P_o = 20 \text{ mW}$	0.4	0.7	1.0	mW/mA
Monitor Current	I_m	$P_o = 20 \text{ mW}$	150	350	1200	μA