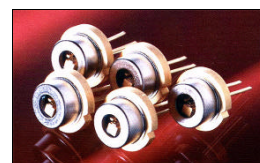


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RLT9850G TECHNICAL DATA

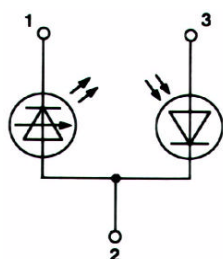


High Power Infrared Laserdiode

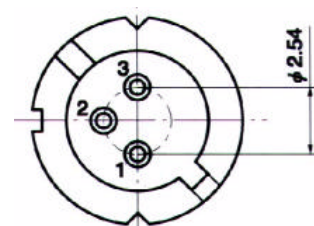
Structure: **GaAlAs double heterostructure**
Lasing wavelength: **980 nm typ., singlemode**
Max. optical power: **55 mW, 1 x 3 μ m aperture**
Package: **9mm G**

NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Maximum Ratings (T_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	55	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 (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o			50		mW
Threshold Current	I _{th}			45	70	mA
Operation Current	I _{op}	P _o = 50mW		130	150	mA
Lasing Wavelength	λ _p	P _o = 50mW	960	980	990	nm
Beam Divergence	θ	P _o = 50mW	7	10	13	°
Beam Divergence	θ _⊥	P _o = 50mW	15	30	35	°
Differential Efficiency	dP _o /dI _{op}	P _o = 50mW	0.4	0.7	1.0	mW/mA
Monitor Current	I _m	P _o = 50mW	150	350	1000	μA