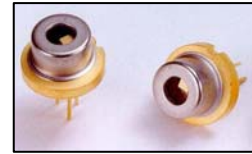




RLT808500G

TECHNICAL DATA



High Power Infrared Laserdiode

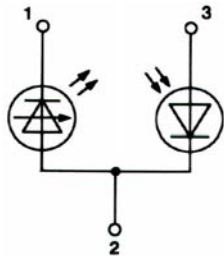
Structure: **High Efficiency MOVCD Quantum Well Design**

Lasing wavelength: **808 nm typ.**

Output power: **500 mW, cw**

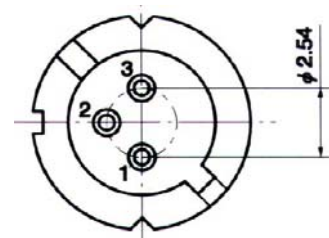
Package: **9 mm**

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_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	550	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _C	-10 .. +40	°C
Storage Temperature	T _{STG}	-40 .. +80	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	kink free		500		mW
Threshold Current	I _{th}	cw		150	180	mA
Operation Current	I _{op}	P _o = 500 mW	650	700	750	mA
Operation Voltage	V _{op}	P _o = 500 mW		1.85	2.0	V
Slope Efficiency	η	cw	0.8	1.0	1.1	W/A
Lasing Wavelength	λ	P _o = 500 mW	805	808	811	nm
Beam Divergence	θ	P _o = 500 mW	5	9	12	°
Beam Divergence	θ _⊥	P _o = 500 mW	30	35	45	°
Lasing Aperture	A	P _o = 500 mW		50x1		μm ²
Recommended Operating Temperature	T _{op}	cw	20	25	40	°C
Monitor Current	I _m	P _o = 500 mW		0.6	1.5	mA