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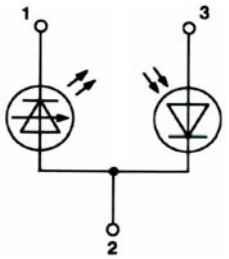
RLT808500G

TECHNICAL DATA

High Power Infrared Laserdiode

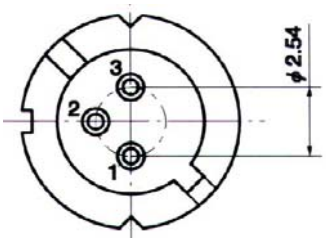
Structure: **High Efficiency MOVCD Quantum Well Design**
Lasing wavelength: **808 nm typ.**
Output power: **500 mW, cw**
Package: **9 mm**

NOTE!
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:

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



Absolute Maximum Ratings (Tc=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 (Tc = 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	$\theta_{//}$	P_o = 500 mW	5	9	12	°
Beam Divergence	$\theta_{\perp}$	P_o = 500 mW	30	35	45	°
Lasing Aperture	A	P_o = 500 mW		50x1		µm²
Recommended Operating Temperature	T_{op}	cw	20	25	40	°C
Monitor Current	I_m	P_o = 500 mW		0.6	1.5	mA