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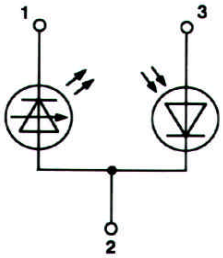
RLT8081000G TECHNICAL DATA

High Power Infrared Laserdiode

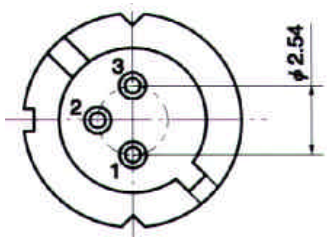
Structure **High Efficiency MOVCD Quantum Well Design**
Lasing wavelength **808 nm typ.**
Output power **1 W, CW**
Package **9 mm G**

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	1100	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		1	1.1	W
Threshold Current	I_{th}	-		200	260	mA
Operation Current	I_{op}	P_o = 1W		1.2	1.4	A
Operation Voltage	V_{op}	P_o = 1W		1.95	2.2	V
Slope Efficiency	η	-	0.8	1.0	1.1	W/A
Lasing Wavelength	λ	P_o = 1W	805	808	811	nm
Beam Divergence	$\theta_{//}$	P_o = 1W	5	9	12	°
Beam Divergence	$\theta_{\perp}$	P_o = 1W	30	35	45	°
Lasing Aperture	A	P_o = 1W		100x1		µm²
Operating Temperature	T_{op}	-	20	25	40	°C
Monitor Current	I_m	P_o =1W		1.2	2.5	mA