

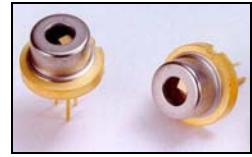
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RLT9810GS TECHNICAL DATA



Infrared Laser Diode

Lasing wavelength: **980 nm**

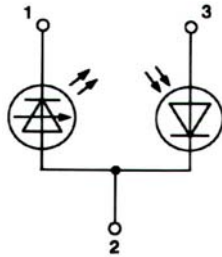
Optical power: **10 mW**

Package: **9 mm**

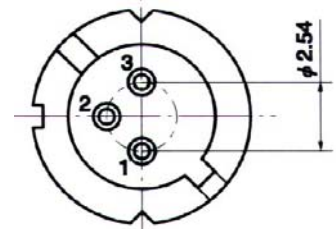
NOTE!
LASER DIODE
MUST BE COOLED!



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	12	mW
LD Reverse Voltage	$V_{R(LD)}$	0.5	V
PD Reverse Voltage	$V_{R(PD)}$	5	V
Operation Case Temperature	T_C	-0 .. +40	°C
Storage Temperature	T_{STG}	-20 .. +70	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	cw		10		mW
Threshold Current	I_{th}	cw		50	75	mA
Operation Current	I_{op}	$P_o = 10 \text{ mW}$		150	190	mA
Operating Voltage	V_{op}	$P_o = 10 \text{ mW}$	1.4	1.5	1.8	V
Lasing Wavelength	λ	$P_o = 10 \text{ mW}$	970	980	990	nm
Beam Divergence	$\theta_{//}$	$P_o = 10 \text{ mW}$	6	8	12	°
Beam Divergence	θ_{\perp}	$P_o = 10 \text{ mW}$	25	30	35	°
Monitor Current	I_m	$P_o = 10 \text{ mW}$		1.0	1.2	mA