RLT9830G

IR Laser Diode
Technical Data

Features

- **MQW Structure**
- **Wavelength : 980 nm (Typ.)**
- **Optical Power : 30 mW CW**
- **Threshold Current : 30 mA (Typ.)**
- **Standard Package : 9.0 mm Ø**

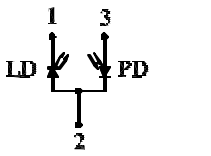
ABSOLUTE MAXIMUM RATINGS (Tc=25ºC)

DESCRIPTION	SYMBOL	RATED VALUE
Optical Power (mW)	Po	30
Operation Temperature (ºC)	Top	-10 to +70
Storage Temperature (ºC)	Tstg	-40 to +85
LD Reverse Voltage (V)	VLDR	2
PD Reverse Voltage (V)	VPDR	30

OPTICAL AND ELECTRICAL CHARACTERISTICS (Tc=25ºC)

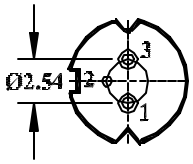
DESCRIPTION	SYMBOL	MIN.	TYPICAL	MAX.	TEST CONDITION
Lasing Wavelength (nm)	lp	960	970	980	Po=30 mW
Threshold Current (mA)	Ith	-	30	50	Po=30 mW
Operation Current (mA)	Iop	50	70	90	Po=30 mW
Operation Voltage (V)	Vop	1.9	2.1	2.3	Po=30 mW
Monitor Current (mA)	Im	0.05	0.1	0.3	Po=30 mW
Slope Efficiency (mW/mA)	ç	0.5	0.7	0.9	***
Beam Divergence (º)	q	8	10	15	Po=30 mW
Beam Divergence ^ (º)	q^	25	33	40	Po=30 mW

Pin Connection

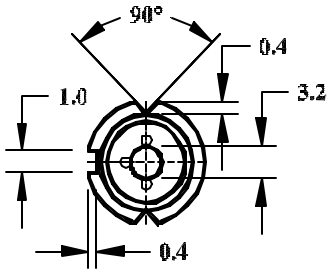


1. Laser diode cathode
2. Laser diode anode
   Photodiode cathode
3. Photodiode anode

* Case and Pin no. 2 are common



Bottom View



Top View