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RLT760-10G

- Infrared FP Laser Diode
- 760 nm ± 5 nm, 10 mW CW
- Single Mode
- 9 mm TO package, flat window
- Built in Monitor PD

RoHS COMPLIANT Pb-Free

Description

RLT760-10G is a Laser Diode emitting at typical 760 nm with rated output power of 10 mW CW at room temperature. The 9 mm TO package includes a cap and flat window, and contains a built in **monitor PD**.

Maximum Ratings

Parameter	Symbol	Values		Unit
		Min.	Max.	
Optical Output Power	P_O		10	mW
Operating Temperature	T_{CASE}	-20	+60	°C
Storage Temperature	T_{STG}	-40	+85	°C
Soldering Temperature	T_{SOLD}		180	°C

Specifications

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Central Wavelength	λ_C	755	760	765	nm
Optical Output Power	P_O	-	10	-	mW
Emitting Area	W x H		3 x 1.5		µm
Threshold Current	I_{TH}	30	40	50	mA
Forward Current	I_{OP}	150	200	250	mA
Forward Voltage	U_{OP}	1.5	2.0	2.2	V
Beam Divergence	ΘII	8	10	12	deg.
Beam Divergence	Θ⊥	25	30	35	deg.
Spectral Width (FWHM)	Δλ	1.0	2.0	5.0	nm
Static Alignment	Δa II x	-	-	< ±3	deg.
Positional Accuracy	ΔX, ΔY, ΔZ	-	-	±100	µm
Mode Structure			SM		-
Slope Efficiency	η	-	0.5	-	mW/mA
Monitor Current	I_M	0.07	0.4	0.8	mA

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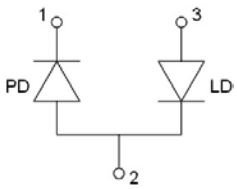
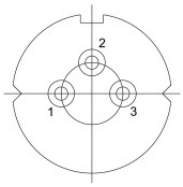
Electrical Connection

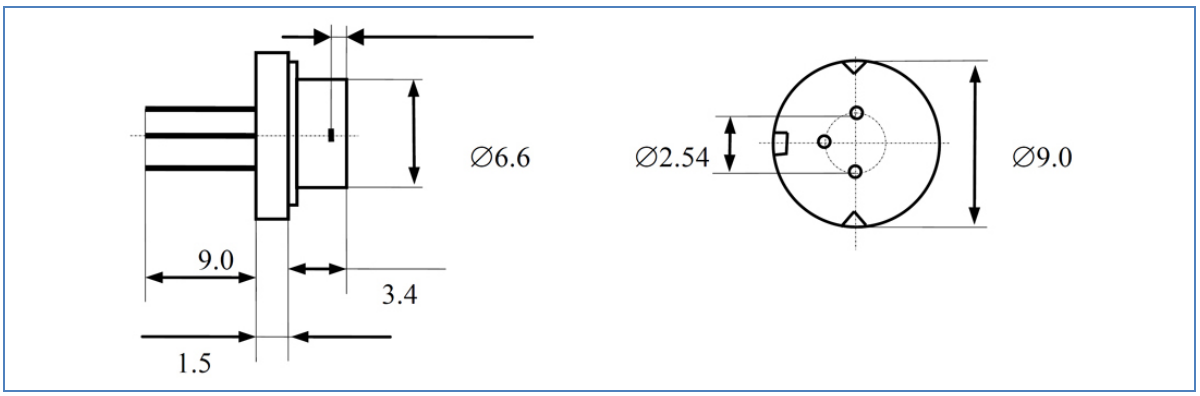
Lead	Description
PIN 1	PD Cathode
PIN 2	PD Anode, LD Cathode
PIN 3	LD Anode





Bottom View

Drawing



All dimensions in mm

Mounting Instruction

In order to maintain lifetime and stability of the laser diode it is essential to provide efficient heat management. Heat dissipation is possible through the base plate only. For long time stable operation proper contact between laser diode base plate and heat sink is mandatory.

Safety Advice

This laser module emits highly concentrated ultra violet light which can be **hazardous to the human eye**. This module is classified as **Class 3B laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**. Actual laser light emitted and precautions necessary strongly depend on mode of operation.