

ROITHNER LASERTECHNIK

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RLT8710MG TECHNICAL DATA



High Power Infrared Laserdiode

Structure: index guided single transverse mode

Lasing wavelength: 870 nm typ.

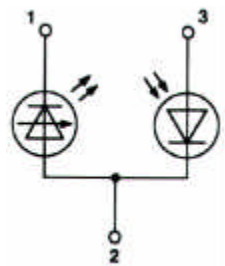
Output power: 10 mW cw

Package: 5.6 mm, TO-18

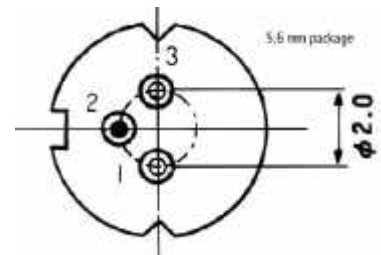


NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Maximum Ratings (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	10	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operation Case Temperature	T _C	-10 .. +60	°C
Storage Temperature	T _{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I _{th}	cw	7	10	15	mA
Operation Current	I _{op}	P _o = 10 mW	20	25	30	mA
Operating Voltage	V _{op}	P _o = 10 mW		1.7	1.9	V
Lasing Wavelength	λ _p	P _o = 10 mW	865	870		nm
Beam Divergence	θ _{//}	P _o = 10 mW	9	10	12	°
Beam Divergence	θ _⊥	P _o = 10 mW	30	33	38	°
Slope Efficiency	η	cw	0.5	0.7	1	mW/mA
Monitor Current	I _m	P _o = 10 mW	350	400	500	μA