

ROITHNER LASERTECHNIK

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RLT9850MG

TECHNICAL DATA



High Power Infrared Laserdiode

Structure: index guided, single transverse mode

Lasing wavelength: 980 nm typ.

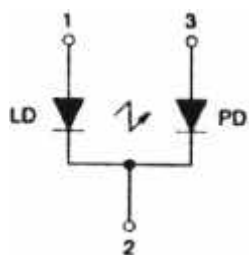
Output power: 50 mW cw

Package: 5.6 mm, TO-18

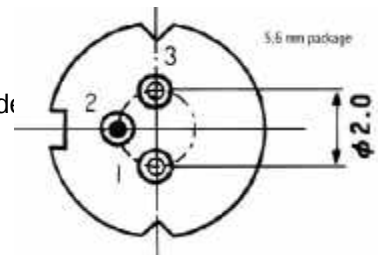


NOTE!
LASERDIODE
MUST BE COOLED!

PIN CONNECTION:



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



Maximum Ratings (T_c = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	50	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 (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I _{th}	cw		10	15	mA
Operation Current	I _{op}	P _o = 50 mW		70	85	mA
Operating Voltage	V _{op}	P _o = 50 mW		1.7	1.9	V
Lasing Wavelength	λ _p	P _o = 50 mW		980	985	nm
Beam Divergence	θ	P _o = 50 mW	7	8	12	°
Beam Divergence	θ _⊥	P _o = 50 mW	30	33	38	°
Slope Efficiency	η	cw	0.5	0.7	1	mW/mA
Monitor Current	I _m	P _o = 50 mW		0.75	1.2	mA