

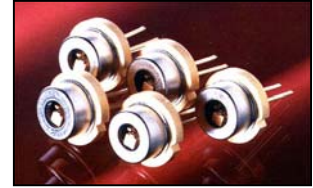
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RLT905-500G TECHNICAL DATA



High Power Infrared Laser Diode

Lasing mode structure: **multi mode**

Lasing wavelength: **typ. 905 nm**

Optical cw power: **500 mW**

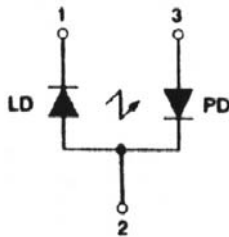
Package: **9 mm (SOT-148)**

NOTE!

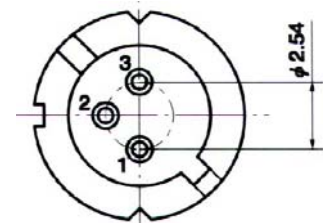
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



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



Absolute Maximum Ratings (T_c = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	600	mW
LD Reverse Voltage	V _{R(LD)}	1.5	V
PD Reverse Voltage	V _{R(PD)}	10	V
Operating Temperature	T _C	-20 .. +40	°C
Storage Temperature	T _{STG}	-40 .. +70	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Emitting Aperture	A	cw		1 x 50		μm ²
Optical Output Power	P _o	cw		500		mW
Threshold Current	I _{th}	cw	90	100	110	mA
Operation Current	I _{op}	P _o = 500 mW	650	670	690	mA
Forward Voltage	U _f	P _o = 500 mW	1.70	1.75	1.85	V
Lasing Wavelength	λ _p	P _o = 500 mW	900	905	910	nm
Spectral Width FWHM	Δλ	P _o = 500 mW	1.5	2.5	10	nm
Beam Divergence	θ _∥	P _o = 500 mW		25		°
Beam Divergence	θ _⊥	P _o = 500 mW		40		°
Monitor Current	I _m	P _o = 500 mW	100	500	1500	μA