

ROITHNER LASERTECHNIK

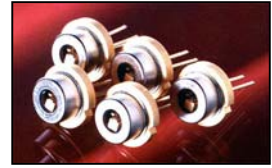
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RLT83500G

TECHNICAL DATA

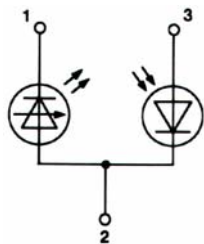


High Power Infrared Laserdiode

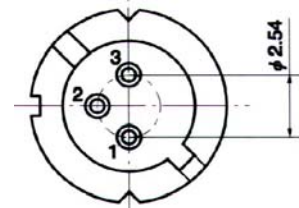
Lasing wavelength: **830 nm typ.**
 Optical power: **500 mW multimode**
 Package: **9 mm**

NOTE!
 LASERDIODE
 MUST BE COOLED!

PIN CONNECTION:



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



Absolute Maximum Ratings (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	600	mW
LD Reverse Voltage	V _{R(LD)}	0.5	V
PD Reverse Voltage	V _{R(PD)}	25	V
Operation Case Temperature	T _C	-30 .. +40	°C
Storage Temperature	T _{STG}	-60 .. +60	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	cw		500		mW
Threshold Current	I _{th}	cw	150	180	200	mA
Operation Current	I _{op}	P _o = 500 mW		700	750	A
Operating Voltage	V _{op}	P _o = 500 mW		1.8	2.4	V
Lasing Wavelength	λ _p	P _o = 500 mW	825	830	835	nm
Spectral Width	Δλ	P _o = 500 mW		3		nm
Beam Divergence	θ _∥	P _o = 500 mW	8	10	12	°
Beam Divergence	θ _⊥	P _o = 500 mW	30	40	45	°
Monitor Current	I _m	P _o = 500 mW	0.5	2.0	3.0	mA