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RLT91500G TECHNICAL DATA



High Power Infrared Laserdiode

Structure: **AlGaAs quantum well**

Lasing wavelength: **915 nm typ., multimode**

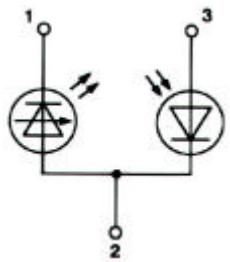
Optical power: **500 mW, 1 x 50 μm^2 aperture**

Package: **9 mm**

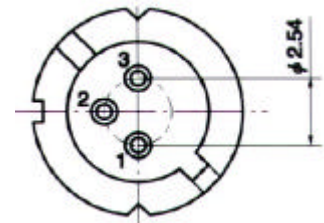
NOTE!
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



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



Maximum Ratings (T_c=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	500	mW
LD Reverse Voltage	V _{R(LD)}	2	V
PD Reverse Voltage	V _{R(PD)}	30	V
Operating Temperature	T _C	-40 .. +50	°C
Storage Temperature	T _{STG}	-70 .. +85	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	cw		500		mW
Threshold Current	I _{th}	cw	80	100	120	mA
Operation Current	I _{op}	P _o = 500 mW	500	600	700	mA
Operation Voltage	U _{op}	P _o = 500 mW	1.6	1.8	2.0	V
Lasing Wavelength	λ_p	P _o = 500 mW	910	915	920	nm
Spectral Width FWHM	$\Delta\lambda$	P _o = 500 mW		10		nm
Beam Divergence	$\theta_{//}$	P _o = 500 mW		8		°
Beam Divergence	$\theta_{\perp}$	P _o = 500 mW	35	40	45	°
Differential Efficiency	dP _o /dI _{op}	P _o = 500 mW	0.8	1.0	1.2	mW/mA
Monitor Current	I _m	P _o = 500 mW	150	350	800	μA