

ROITHNER LASERTECHNIK

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RLT83200G

TECHNICAL DATA



High Power Infrared Laserdiode

Aperture: **1.5 x 100 μm**

Lasing wavelength: **830 nm typ.**

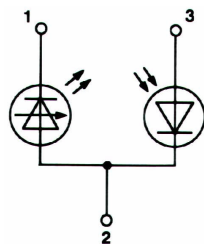
Optical power: **200 mW typ., multimode**

Package: **9 mm**

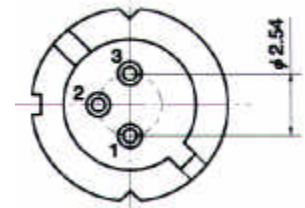
NOTE!
LASERDIODE
MUST BE COOLED!



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	220	mW
LD Reverse Voltage	$V_{R(LD)}$	0.5	V
PD Reverse Voltage	$V_{R(PD)}$	25	V
Operation Case Temperature	T_c	-60 .. +50	°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		200	220	mW
Threshold Current	I_{th}	cw		350		mA
Operation Current	I_{op}	$P_o = 200 \text{ mW}$	430	520	600	mA
Operating Voltage	V_{op}	$P_o = 200 \text{ mW}$		1.8	2.4	V
Lasing Wavelength	λ_p	$P_o = 200 \text{ mW}$	820	830	840	nm
Spectral Width	$\Delta\lambda$	$P_o = 200 \text{ mW}$		3		nm
Beam Divergence	$\theta_{//}$	$P_o = 200 \text{ mW}$	8	10	12	°
Beam Divergence	$\theta_{\perp}$	$P_o = 200 \text{ mW}$	30	40	45	°
Monitor Current	I_m	$P_o = 200 \text{ mW}$	0.5	2.0	5.0	mA