

ROITHNER LASERTECHNIK

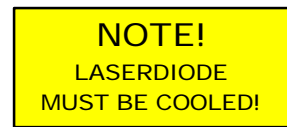
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RLT808100GM TECHNICAL DATA

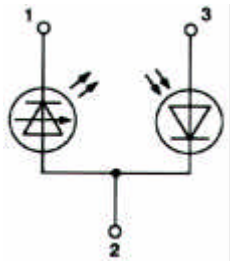


High Power Infrared Laserdiode

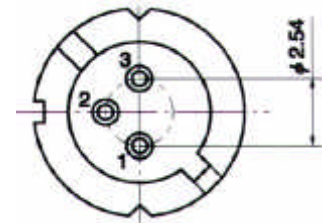
Structure: **AlGaAs/GaAs quantum well**, aperture **15 x 1.5 μm**
 Lasing wavelength: **808 +/- 3 nm typ.**, multimode
 Max. optical power: **130 mW**
 Package: **9 mm G**



PIN CONNECTION:



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



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P_o	130	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	5	V
Operating Temperature	T_C	-50 .. +60	°C
Storage Temperature	T_{STG}	-50 .. +80	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	cw		100		mW
Threshold Current	I_{th}	cw	50	55	65	mA
Operation Current	I_{op}	$P_o = 100 \text{ mW}$	270	380	400	mA
Lasing Wavelength	λ_p	$P_o = 100 \text{ mW}$	805	808	810	nm
Beam Divergence	$\theta_{//}$	$P_o = 100 \text{ mW}$		8		°
Beam Divergence	θ_{\perp}	$P_o = 100 \text{ mW}$		35		°
Differential Efficiency	dP_o/dI_{op}	$P_o = 100 \text{ mW}$		0.75	0.9	mW/mA
Monitor Current	I_m	$P_o = 100 \text{ mW}$	100	250	3000	μA