

ROITHNER LASERTECHNIK

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S808500G TECHNICAL DATA



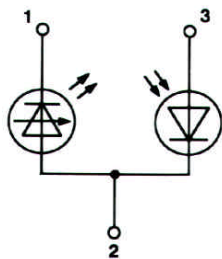
High Power Infrared Laserdiode

Structure: **InGaAs, active MQW**
 Lasing wavelength: **808 nm typ., multimode**
 Output power: **500 mW, cw**
 Package: **9 mm**

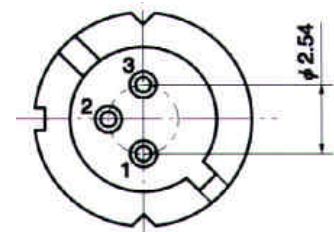
NOTE!
 LASERDIODE
 MUST BE COOLED!



PIN CONNECTION:



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



Absolute Maximum Ratings (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	-10 .. +40	°C
Storage Temperature	T _{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I _{th}	cw operation		130	165	mA
Operation Current	I _{op}	P _o = 500 mW		650	720	mA
Operation Voltage	V _{op}	P _o = 500 mW		1.9	2.4	V
Slope Efficiency	η	cw operation	0.9	1	1.09	W/A
Lasing Wavelength	λ	P _o = 500 mW	803	808	813	nm
Beam Divergence	θ _{//}	P _o = 500 mW	6.5	7.5	9	°
Beam Divergence	θ _⊥	P _o = 500 mW	35	38	45	°
Lasing Aperture	A	P _o = 500 mW		50x1		μm ²
Monitor Current	I _m	P _o = 500 mW	1	2.5	4	mA