

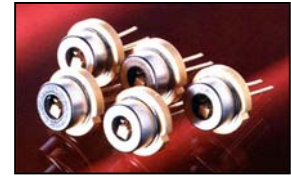
ROITHNER LASERTECHNIK

SCHOENBRUNNER STRASSE 7, A-1040 VIENNA, AUSTRIA

TEL: +43 -1- 586 52 43-0 FAX: +43 -1- 586 52 43-44

office@roithner-laser.com www.roithner-laser.com

RLT8550G TECHNICAL DATA



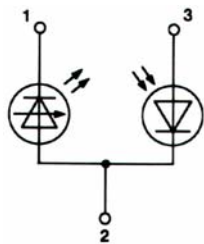
High Power Infrared Laser Diode

Lasing aperture: **1.0 x 3.0 μm^2**
 Lasing wavelength: **typ. 850 nm, single mode**
 Optical power: **typ. 50 mW**
 Package: **9 mm**

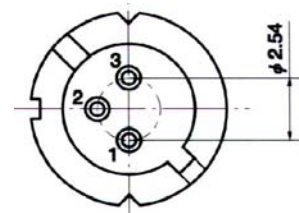
NOTE!
 LASERDIODE
 MUST BE COOLED!



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	55	mW
LD Reverse Voltage	V _{R(LD)}	0.5	V
PD Reverse Voltage	V _{R(PD)}	25	V
Operation Case Temperature	T _C	-50 .. +60	°C
Storage Temperature	T _{STG}	-60 .. +60	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	kink free		50		mW
Threshold Current	I _{th}	cw		50	60	mA
Operation Current	I _{op}	P _o = 50 mW		85	100	mA
Operating Voltage	V _{op}	P _o = 50 mW		1.3	2.5	V
Lasing Wavelength	λ_p	P _o = 50 mW	845	850	860	nm
Beam Divergence	$\theta_{//}$	P _o = 50 mW	8	10	20	°
Beam Divergence	θ_{\perp}	P _o = 50 mW	20	35	40	°
Monitor Current	I _m	P _o = 50 mW	200	250	500	μA