

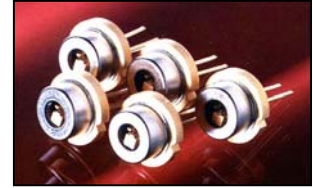
ROITHNER LASERTECHNIK

SCHOENBRUNNER STRASSE 7, VIENNA, AUSTRIA

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

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

RLT940-100GS TECHNICAL DATA



High Power Infrared Laser Diode

Lasing mode structure: **single mode**

Lasing wavelength: **typ. 940 nm**

Optical power: **100 mW**

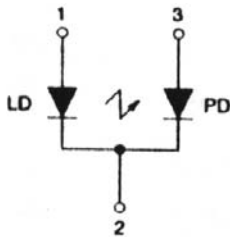
Package: **9 mm (SOT-148)**

NOTE!

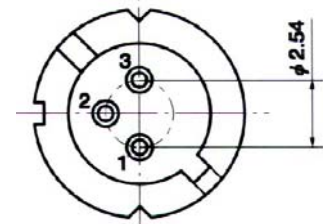
LASERDIODE
MUST BE COOLED!



PIN CONNECTION:



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



Absolute Maximum Ratings (T_c = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P _o	130	mW
LD Reverse Voltage	V _{R(LD)}	1.5	V
PD Reverse Voltage	V _{R(PD)}	10	V
Operating Temperature	T _C	-20 .. +40	°C
Storage Temperature	T _{STG}	-40 .. +70	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Emitting Aperture	A	cw		1 x 5		μm ²
Optical Output Power	P _o	single mode		100		mW
Threshold Current	I _{th}	cw	20	25	30	mA
Operation Current	I _{op}	P _o = 100 mW	140	150	160	mA
Forward Voltage	U _f	P _o = 100 mW	1.5	1.6	1.7	V
Lasing Wavelength	λ _p	P _o = 100 mW	930	940	945	nm
Spectral Width FWHM	Δλ	P _o = 100 mW		0.2	0.3	nm
Beam Divergence	θ _{//}	P _o = 100 mW		25		°
Beam Divergence	θ _⊥	P _o = 100 mW		40		°
Monitor Current	I _m	P _o = 100 mW	100	500	1500	μA