

ROITHNER LASERTECHNIK

A-1040 WIEN, FLEISCHMANNGASSE 9
TEL: +43 -1- 586 52 43 FAX: +43 -1- 586 41 43
e-mail: rlt@mcb.at <http://www.roithner.mcb.at>

RLT9810G TECHNICAL DATA



Infrared Laserdiode

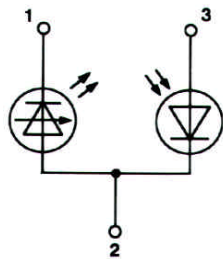
Lasing wavelength: **980 nm typ., single mode**
Max. optical power: **12 mW**
Package: **9 mm, SOT-148**

NOTE!
LASERDIODE
MUST BE COOLED!

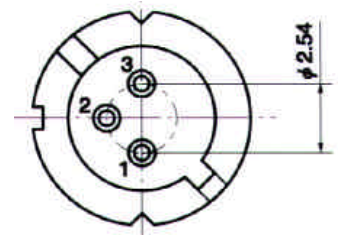


ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC SENSITIVE DEVICE

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	12	mW
LD Reverse Voltage	V _{R(LD)}	0.5	V
PD Reverse Voltage	V _{R(PD)}	5	V
Operation Case Temperature	T _C	-20 .. +40	°C
Storage Temperature	T _{STG}	-60 .. +70	°C

Optical-Electrical Characteristics (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	-		10		mW
Threshold Current	I _{th}	-	15	25	35	mA
Operation Current	I _{op}	P _o = 10 mW		35	60	mA
Operating Voltage	V _{op}	P _o = 10 mW	1.4	1.5	1.8	V
Lasing Wavelength	λ	P _o = 10 mW	970	980	990	nm
Beam Divergence	θ	P _o = 10 mW	6	8	12	°
Beam Divergence	θ _⊥	P _o = 10 mW	25	30	35	°
Emitting Aperture	A	-	1 x 2	1 x 3	1 x 4	μm
Monitor Current	I _m	P _o = 10 mW	50	100		μA