

ROITHNER LASERTECHNIK

A-1040 VIENNA, SCHOENBRUNNER STRASSE 7, AUSTRIA

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

e-mail: office@roithner-laser.com <http://www.roithner-laser.com>

RLT1550-20G TECHNICAL DATA



High Power Infrared Laserdiode

Structure: **GaInAsP/InP SQW structure**
Lasing wavelength: **1550 nm, single mode**
Typ. optical power: **20 mW**
Package: **9 mm (SOT-148)**

NOTE!

**LASERDIODE
MUST BE COOLED!**

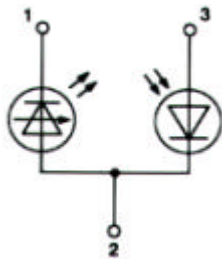


ATTENTION

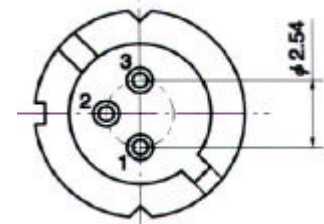
OBSERVE PRECAUTIONS
FOR HANDLING

ELECTROSTATIC SENSITIVE DEVICE

PIN CONNECTION:



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



Absolute Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Maximum LD Current	I_f	200	mA
Optical Output Power	P_o	40	mW
LD Reverse Voltage	$V_{R(LD)}$	1.5	V
PD Reverse Voltage	$V_{R(PD)}$	6	V
Operating Temperature	T_C	-20 .. +40	°C
Storage Temperature	T_{STG}	-40 .. +85	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Lasing Aperture	A	cw		1 x 5		μm^2
Optical Output Power	P_o	cw		20		mW
Threshold Current	I_{th}	cw		55		mA
Operation Current	I_{op}	$P_o = 20 \text{ mW}$		160		mA
Forward Voltage	U_f	$P_o = 20 \text{ mW}$		2		V
Lasing Wavelength	λ_p	$P_o = 20 \text{ mW}$	1520	1550	1580	nm
Beam Divergence	$\theta_{//}$	$P_o = 20 \text{ mW}$		25		°
Beam Divergence	$\theta_{\perp}$	$P_o = 20 \text{ mW}$		40		°
Monitor Current	I_m	$P_o = 20 \text{ mW}$	> 20	100		μA