

ROITHNER LASERTECHNIK

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RLT1550-10G TECHNICAL DATA



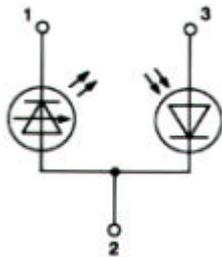
Infrared Laserdiode

Structure: **GaInAsP/InP SQW structure**
 Lasing wavelength: **single mode 1550 nm typ.**
 Typ. optical power: **10 mW**
 Package: **9 mm (SOT-148)**

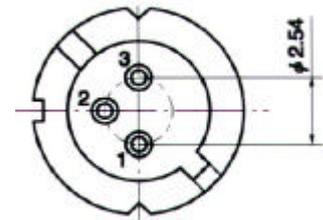
NOTE!
 LASERDIODE
 MUST BE COOLED!

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	150	mA
Optical Output Power	P_o	30	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
Aperture	A			1 x 5		μm^2
Optical Output Power	P_o	cw		10		mW
Threshold Current	I_{th}	cw		50		mA
Operation Current	I_{op}	$P_o = 10 \text{ mW}$		110		mA
Forward Voltage	U_f	$P_o = 10 \text{ mW}$		2		V
Lasing Wavelength	λ_p	$P_o = 10 \text{ mW}$	1520	1550	1580	nm
Beam Divergence	$\theta_{//}$	$P_o = 10 \text{ mW}$		25		°
Beam Divergence	θ_{\perp}	$P_o = 10 \text{ mW}$		40		°
Monitor Current	I_m	$P_o = 10 \text{ mW}$	> 20	100		μA