

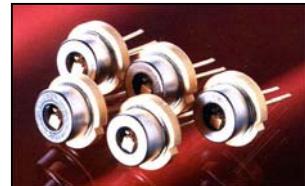
# ROITHNER LASERTECHNIK

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

## RLT960M-1WG TECHNICAL DATA



### High Power Infrared Laser Diode

Lasing mode structure: **multi mode**

Lasing wavelength: **typ. 960 nm**

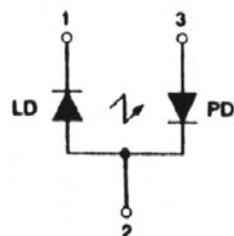
Optical power: **1 W**

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

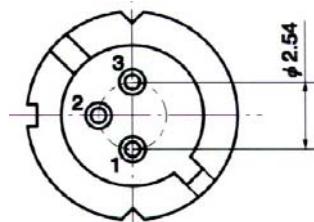
NOTE!  
LASERDIODE  
MUST BE COOLED!



#### PIN CONNECTION:



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



#### Absolute Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	$P_o$	1.2	W
LD Reverse Voltage	$V_{R(LD)}$	1.5	V
PD Reverse Voltage	$V_{R(PD)}$	10	V
Operating Temperature	$T_c$	-20 .. +35	°C
Storage Temperature	$T_{STG}$	-40 .. +70	°C

#### Optical-Electrical Characteristics ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Emitting Aperture	A	cw		1 x 100		μm <sup>2</sup>
Optical Output Power	$P_o$	multi mode		1		W
Threshold Current	$I_{th}$	cw	190	200	250	mA
Operation Current	$I_{op}$	$P_o = 1 \text{ W}$	1.1	1.2	1.3	A
Forward Voltage	$U_f$	$P_o = 1 \text{ W}$		1.7	1.8	V
Lasing Wavelength	$\lambda_p$	$P_o = 1 \text{ W}$	955	960	965	nm
Spectral Width FWHM	$\Delta\lambda$	$P_o = 1 \text{ W}$	1.0	1.2	1.6	nm
Beam Divergence	$\theta_{//}$	$P_o = 1 \text{ W}$		25		°
Beam Divergence	$\theta_{\perp}$	$P_o = 1 \text{ W}$		30		°
Monitor Current	$I_m$	$P_o = 1 \text{ W}$	100	500	1500	μA