

# ROITHNER LASERTECHNIK

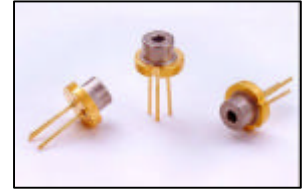
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## RLT904-10MG

### TECHNICAL DATA



### Infrared Laserdiode

Structure: index guided, single transverse mode

Lasing wavelength: typ. 904 nm

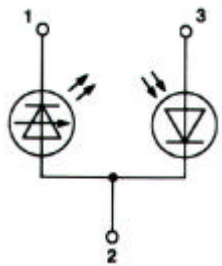
Output power: 10 mW

Package: 5.6 mm, TO-18

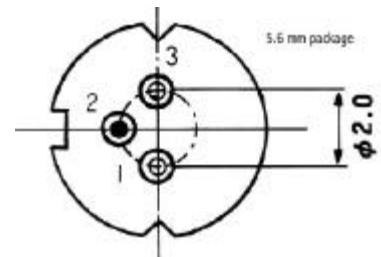


**NOTE!**  
LASERDIODE  
MUST BE COOLED!

### 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
Optical Output Power	$P_o$	12	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	$T_C$	-10 .. +60	°C
Storage Temperature	$T_{STG}$	-40 .. +85	°C

### Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	$I_{th}$	cw		15	20	mA
Operation Current	$I_{op}$	$P_o = 10 \text{ mW}$		35	45	mA
Operating Voltage	$V_{op}$	$P_o = 10 \text{ mW}$		1.6	1.8	V
Lasing Wavelength	$\lambda_p$	$P_o = 10 \text{ mW}$	895	904	910	nm
Beam Divergence	$\theta_{//}$	$P_o = 10 \text{ mW}$	7	8	12	°
Beam Divergence	$\theta_{\perp}$	$P_o = 10 \text{ mW}$	30	33	38	°
Slope Efficiency	$\eta$	cw	0.5	0.7	1	mW/mA
Monitor Current	$I_m$	$P_o = 10 \text{ mW}$	100	500	1000	$\mu\text{A}$