

# ROITHNER LASERTECHNIK

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## RLT8340MG TECHNICAL DATA



### High Power Infrared Laserdiode

Structure: **AlGaAs double heterostructure**

Lasing wavelength: **830 nm typ.**

Max. optical power: **40 mW, single mode**

Package: **5.6 mm**

**NOTE!**

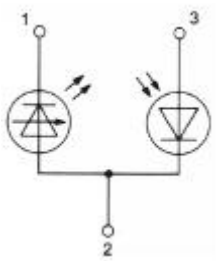
LASERDIODE  
MUST BE COOLED!

**ATTENTION**

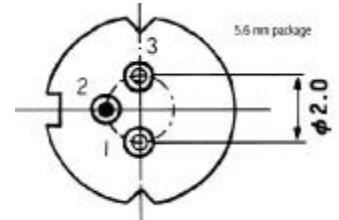
OBSERVE PRECAUTIONS  
FOR HANDLING

ELECTROSTATIC SENSITIVE DEVICE

### PIN CONNECTION:



- 1) Laserdiode cathode
- 2) Laserdiode anode and photodiode cathode
- 3) Photodiode anode



### Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	$P_o$	40	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operating Temperature	$T_{op}$	-10 .. +50	°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	25	mA
Operation Current	$I_{op}$	$P_o = 40 \text{ mW}$	70	80	90	mA
Operation Voltage	$V_{op}$	$P_o = 40 \text{ mW}$		1.8	2.2	V
Lasing Wavelength	$\lambda_p$	$P_o = 40 \text{ mW}$	820	830	840	nm
Beam Divergence	$\theta_{//}$	$P_o = 40 \text{ mW}$	8	10	11	°
Beam Divergence	$\theta_{\perp}$	$P_o = 40 \text{ mW}$	25	31	40	°
Monitor Current	$I_m$	$P_o = 40 \text{ mW}, V_r=5V$	400	600	800	$\mu A$