

# ROITHNER LASERTECHNIK

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## RLT8230G TECHNICAL DATA



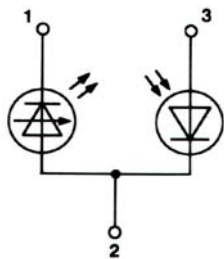
### High Power Infrared Laserdiode

Structure: **AlGaAs/GaAs**  
 Lasing wavelength: **820 nm typ.**  
 Max. optical power: **30 mW, single mode**  
 Package: **9 mm**

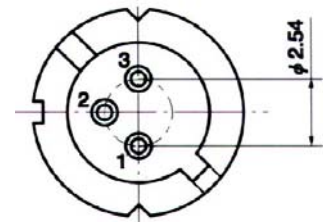
**NOTE!**  
**LASERDIODE**  
**MUST BE COOLED!**

**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
Optical Output Power	$P_o$	33	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	5	V
Operating Temperature	$T_C$	-50 .. +50	°C
Storage Temperature	$T_{STG}$	-60 .. +85	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	$P_o$	cw		30		mW
Threshold Current	$I_{th}$	cw	85	95	100	mA
Operation Current	$I_{op}$	$P_o = 30 \text{ mW}$	120	125	130	mA
Lasing Wavelength	$\lambda_p$	$P_o = 30 \text{ mW}$	815	820	825	nm
Beam Divergence	$\theta_{//}$	$P_o = 30 \text{ mW}$		12		°
Beam Divergence	$\theta_{\perp}$	$P_o = 30 \text{ mW}$		25		°
Differential Efficiency	$dP_o/dI_{op}$	$P_o = 30 \text{ mW}$	0.75	0.90	1.1	mW/mA
Monitor Current	$I_m$	$P_o = 30 \text{ mW}$	80	100	150	μA