



## RLT9830MG

### High Power Infrared Laserdiode

Structure: **index guided, multi transverse mode**

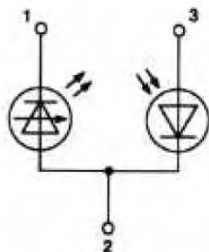
Lasing wavelength: **980 nm typ.**

Output power: **30 mW cw**

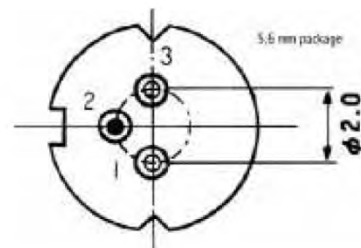
Package: **5.6 mm, TO-18**



#### PIN CONNECTION:



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



#### Maximum Ratings (Tc = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	P <sub>o</sub>	30	mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2	V
PD Reverse Voltage	V <sub>R(PD)</sub>	30	V
Operation Case Temperature	T <sub>C</sub>	-10 .. +60	°C
Storage Temperature	T <sub>STG</sub>	-40 .. +85	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	I <sub>th</sub>	cw	10	15	20	mA
Operation Current	I <sub>op</sub>	P <sub>o</sub> = 30 mW		90		mA
Operating Voltage	V <sub>op</sub>	P <sub>o</sub> = 30 mW		1.5	1.7	V
Lasing Wavelength	λ <sub>p</sub>	P <sub>o</sub> = 30 mW	970	980	983	nm
Beam Divergence	θ <sub>  </sub>	P <sub>o</sub> = 30 mW	7	8	12	°
Beam Divergence	θ <sub>⊥</sub>	P <sub>o</sub> = 30 mW	30	33	38	°
Slope Efficiency	η	cw	0.5	0.7	1	mW/mA
Monitor Current	I <sub>m</sub>	P <sub>o</sub> = 30 mW	100		500	μA