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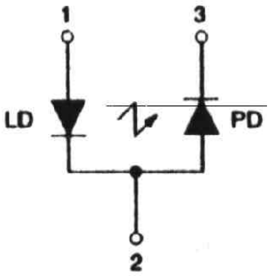
RLT7830MG TECHNICAL DATA

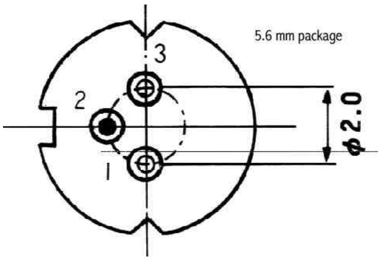
High Power Infrared Laserdiode

Structure: **AlGaAs, index guided, single transverse mode**
Lasing wavelength: **785 nm typ.**
Max. optical power: **30 mW cw**
Package: **5.6 mm MG**

PIN CONNECTION:



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



Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power cw	P_o	35	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}	-10 .. +100	°C

Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P_o	kink free		30	45 *)	mW
Threshold Current	I_{th}	cw		35	55	mA
Operation Current	I_{op}	P_o =30mW		90	110	mA
Operating Voltage	V_{op}	P_o =30mW		2.0	2.5	V
Lasing Wavelength	λ_p	P_o =30mW	770	785	800	nm
Beam Divergence	θ//	P_o =30mW	8	10	13	°
Beam Divergence	θ⊥	P_o =30mW	22	25	28	°
Slope efficiency	η	P_o =30mW	0.40	0.55	0.75	mW/mA
Monitor Current	I_m	P_o=30mW, V_r=5V		0.4		mA

*) Note: Duty cycle less than 50%, pulse width less than 1µs