

ROITHNER LASERTECHNIK

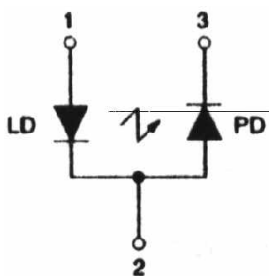
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RLT6830G TECHNICAL DATA

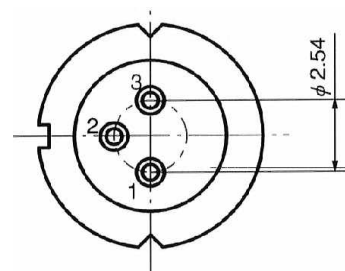
High Power Visible Wavelength Laserdiode

Structure: **AlGaInP**, index guided, single transverse mode
 Lasing wavelength: **685 nm typ.**
 Max. optical power: **30 mW cw**
 Package: **9 mm G or 5.6 mm MG**

PIN CONNECTION:



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



Maximum Ratings (T_c=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 (T_c = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	P _o	kink free		30	50 *)	mW
Threshold Current	I _{th}	cw		35	60	mA
Operation Current	I _{op}	P _o = 30mW		80	120	mA
Operating Voltage	V _{op}	P _o = 30mW	2.0	2.4	3.0	V
Lasing Wavelength	λ _p	P _o = 30mW	670	685	700	nm
Beam Divergence	θ _{//}	P _o = 30mW	7	9.5	12	°
Beam Divergence	θ _⊥	P _o = 30mW	16	20	25	°
Slope efficiency	η	P _o = 30mW		0.75		mW/mA
Monitor Current	I _m	P _o = 30mW, V _r = 5V	0.05	0.2	1.5	mA

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