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RLT6850G TECHNICAL DATA

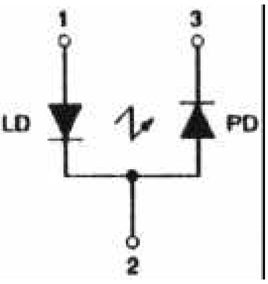
High Power Visible Wavelength Laserdiode

Structure: **AlGaInP, index guided, single transverse mode**
Lasing wavelength: **685 nm typ.**
Max. optical power: **50 mW cw**
Package: **9 mm**

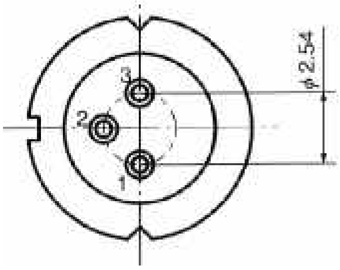
ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING
ELECTROSTATIC SENSITIVE DEVICE

NOTE!
LASERDIODE
MUST BE COOLED!

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	60	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		50		mW
Threshold Current	I_{th}	cw		35	60	mA
Operation Current	I_{op}	P_o = 50 mW		100	140	mA
Operating Voltage	V_{op}	P_o = 50 mW	2.0	2.7	3.0	V
Lasing Wavelength	λ_p	P_o = 50 mW	670	685	700	nm
Beam Divergence	$\theta_{//}$	P_o = 50 mW	7	9.5	12	°
Beam Divergence	$\theta_{\perp}$	P_o = 50 mW	16	20	25	°
Slope efficiency	η	P_o = 50 mW		0.75		mW/mA
Monitor Current	I_m	P_o = 50 mW, V_r=5V	0.05	0.3	2.5	mA