

LNCQ02PS

Red Light Semiconductor Single Mode Laser

■ Features

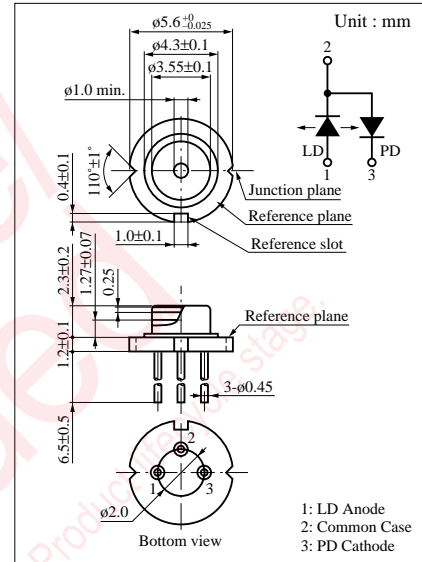
- Oscillating wavelength : 655 nm
- Low astigmatic difference

■ Applications

- Optical data processing devices

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rated	Unit	
Radiant power	P_O	5	mW	
Reverse voltage	Laser	V_R	1.5	V
	PIN	V_R (PIN)	30	V
Power dissipation	P_d (PIN)	60	mW	
Operating ambient temperature	T_{opr}	-10 to +65	°C	
Storage temperature	T_{stg}	-40 to +85	°C	

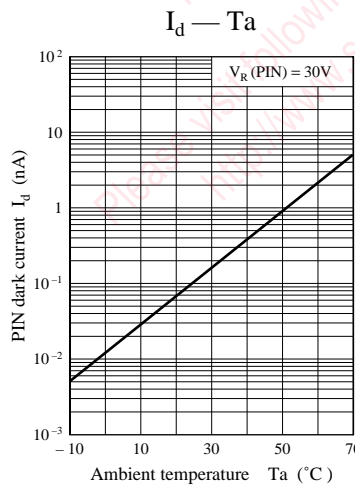
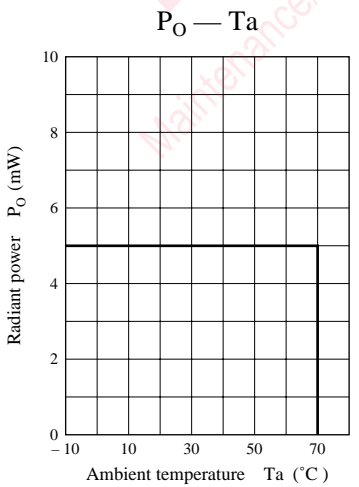
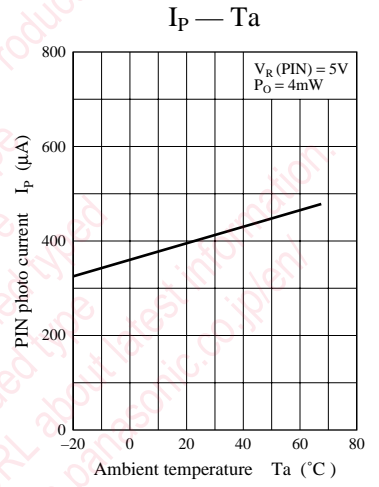
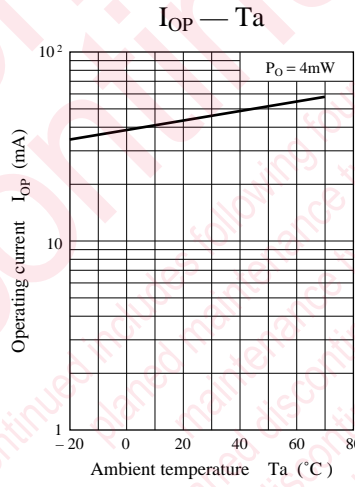
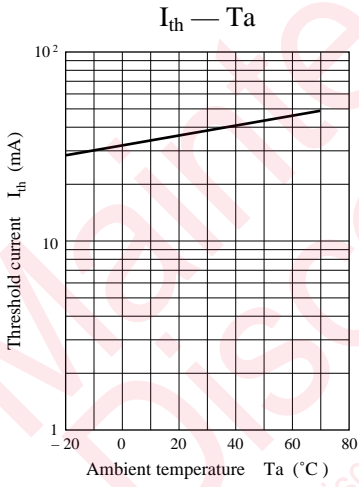
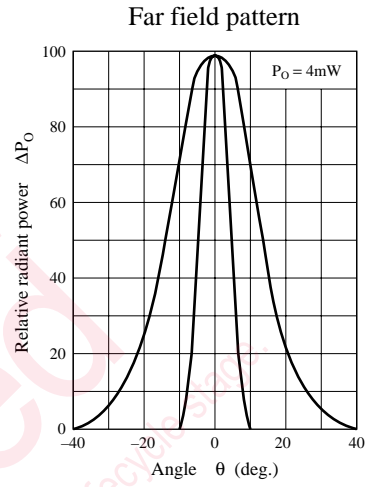
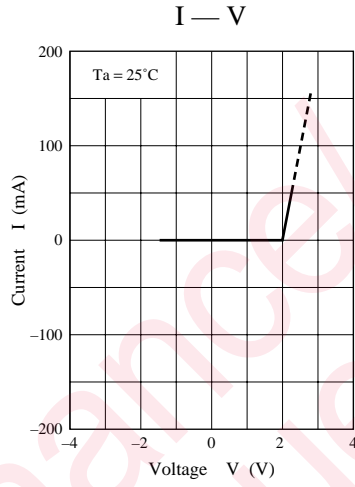
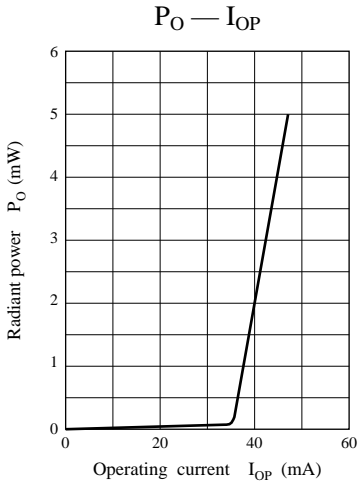


■ Electro-Optical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Threshold current	I_{th}	CW	20	35	70	mA
Operating current	I_{OP}	CW $P_O = 4mW$	30	45	85	mA
Operating voltage	V_{OP}	CW $P_O = 4mW$	1.8	2.3	2.8	V
Slope efficiency	SE	CW $P_O = 1 - 4mW$	0.2	0.5	0.8	W/A
Oscillation wavelength	λ_L	CW $P_O = 4mW$	635	655	665	nm
Radiation angle	Horizontal direction	$\theta_{//}^{*1}$	7	8.5	11	deg.
	Vertical direction	θ_{\perp}^{*1}	19	27	31	deg.
PIN photo current	I_P	CW $P_O = 4mW$, V_R (PIN) = 5V	0.1	0.4	1.0	mA
Reverse current (DC)	I_R	V_R (PIN) = 15V			0.1	μA
Optical axis accuracy	X direction	θ_X	-2.0		+2.0	deg.
	Y direction	θ_Y	-3.0		+3.0	deg.
Astigmatic difference	As^{*2}	CW $P_O = 4mW$		5	8	μm

*1 The radiation angle is indicated as half full angle.

*2 Guaranteed value in design.



Caution for Safety

 **DANGER**

■ **This product contains Gallium Arsenide (GaAs).**

GaAs powder and vapor are hazardous to human health if inhaled or ingested. Do not burn, destroy, cut, cleave off, or chemically dissolve the product. Follow related laws and ordinances for disposal. The product should be excluded from general industrial waste or household garbage.

■ **Do not touch or look into the laser beam directly.**

The laser beam may cause injury to the eye or skin, or loss of eyesight.

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