

LNC702PS

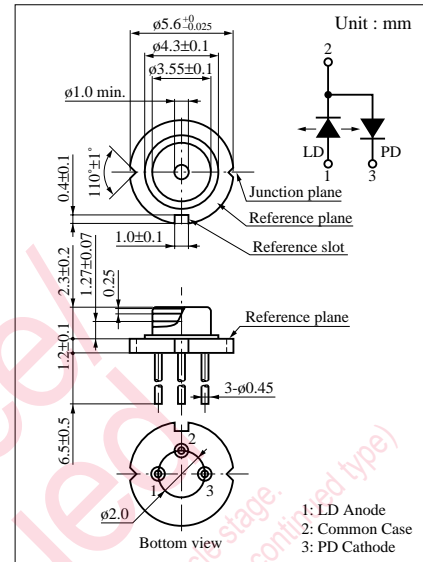
GaAlAs Semiconductor Laser

Features

- Low threshold current
- Stable single horizontal mode oscillation
- Low drooping

Applications

- Optical data processing devices
- Laser beam printers



Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Rated	Unit
Radiant power	P _O	5	mW
Reverse voltage	Laser V _R	2	V
	PIN V _R (PIN)	30	V
Power dissipation	P _d (PIN)	60	mW
Operating ambient temperature	T _{opr}	-10 to +60	°C
Storage temperature	T _{stg}	-40 to +85	°C

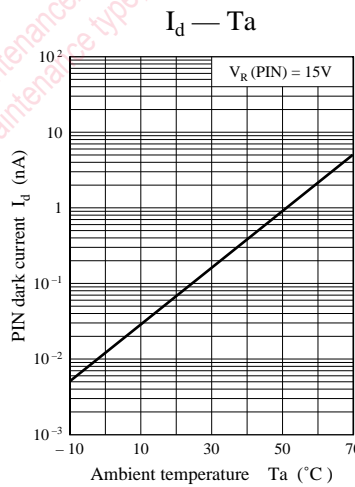
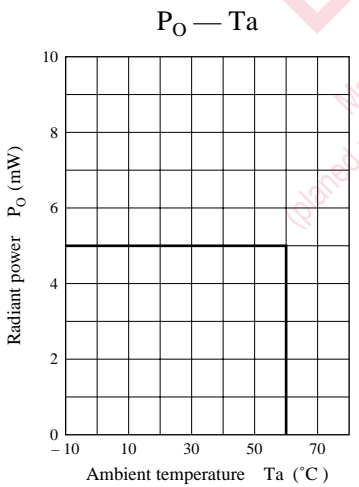
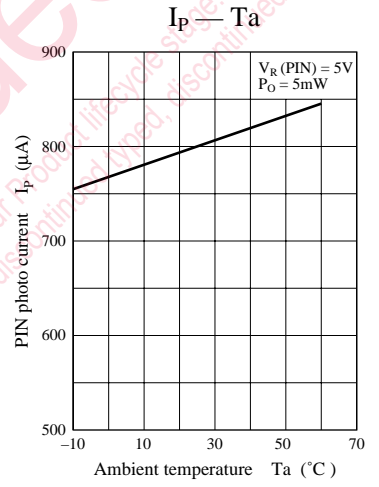
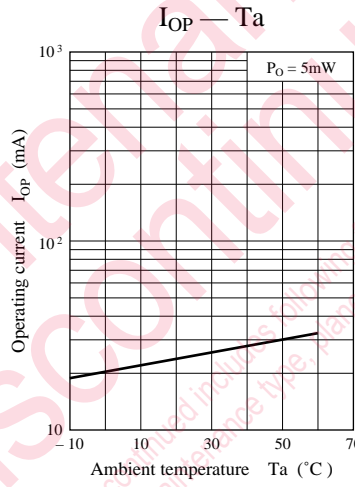
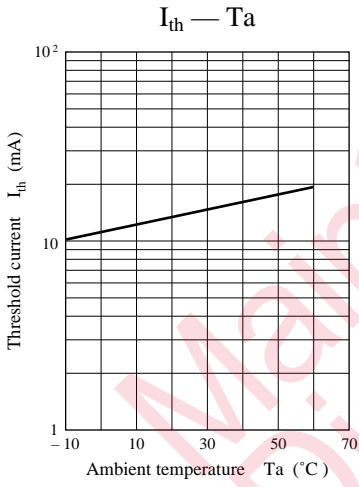
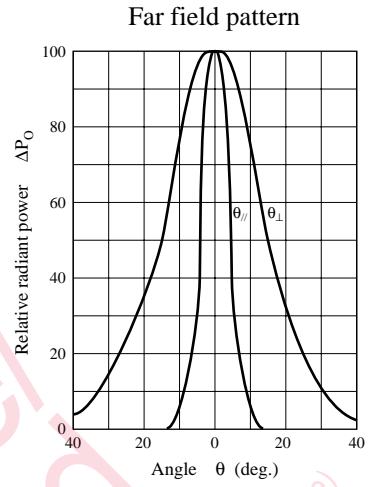
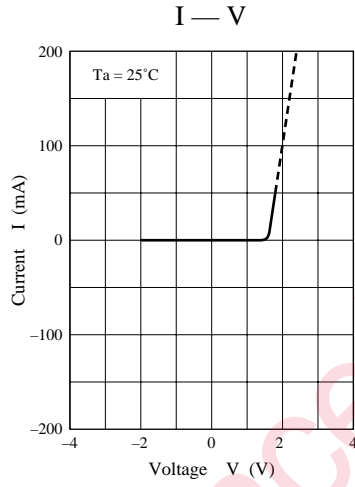
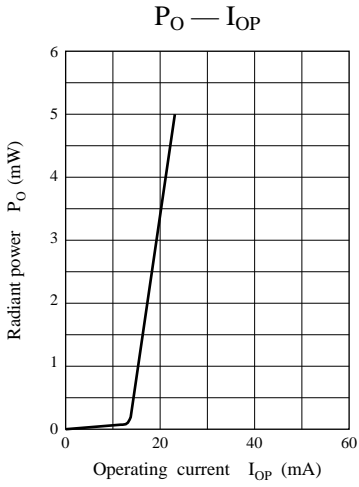
Electro-Optical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Threshold current	I _{th}	CW	15	25	40	mA
Operating current	I _{OP}	CW P _O = 5mW	20	35	50	mA
Operating voltage	V _{OP}	CW P _O = 5mW		1.9	2.5	V
Oscillation wavelength	λ _L *2	CW P _O = 5mW	780	795	810	nm
Radiation angle	Horizontal direction θ _∥ *1	CW P _O = 5mW	8	12	15	deg.
	Vertical direction θ _⊥ *1	CW P _O = 5mW	20	33	45	deg.
PIN photo current	I _P	CW P _O = 5mW, V _R (PIN) = 5V	0.3	0.8	1.6	mA
Reverse current (DC)	I _R	V _R (PIN) = 15V			0.1	μA
Optical axis accuracy	X direction θ _X	CW P _O = 5mW	-2.0		+2.0	deg.
	Y direction θ _Y	CW P _O = 5mW	-3.0		+3.0	deg.

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

*2 Sampling inspections are to be performed.

On each wafer, n = 10 samplings are to be performed, with an evaluation criterion of zero rejects.



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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