

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	Ratings	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.



