

LNCR01PS

Red Light Semiconductor Laser

Features

- High output operations with oscillating wavelength of 685 nm : 35 mW
- Low threshold current
- Stable single horizontal mode oscillation
- Low astigmatic difference facilitates good concentrated light spot production

Applications

- Optical disk memory (write and read)
- Optical measuring equipment

Absolute Maximum Ratings (Ta = 25°C)

Parameter		Symbol	Ratings	Unit
Radiant power		P _O	35	mW
Reverse voltage	Laser	V _R	2	V
	PIN	V _R (PIN)	30	V
Power dissipation		P _d (PIN)	35	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	30	45	60	mA
Operating current	I _{OP}	CW P _O = 30mW	50	80	110	mA
Operating voltage	V _{OP}	CW P _O = 30mW	2.0	2.6	4.0	V
Oscillation wavelength	λ _L ^{*2}	CW P _O = 30mW	670	685	695	nm
Radiation angle	Horizontal direction	θ ^{*1}	7	8.5	10	deg.
	Vertical direction	θ _⊥ ^{*1}	18	21	25	deg.
PIN photo current	I _P	CW P _O = 30mW, V _R (PIN) = 5V	0.1	0.4	0.6	mA
PIN dark current	I _d	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.

^{*1} The radiation angle is indicated as half full angle.

^{*2} Sampling controls on n = 10 per lot



