

For current pricing, please see our website.

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- Accessories

SECTIONS

- Laser Diodes
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- Tunable Lasers
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405 nm Pigtailed Laser Diode



Available with Single Mode Fiber

See page 1253

$\lambda = 375 \text{ nm}$, $P = 20 \text{ mW}$, Single Mode Thorlabs L375P020MLD

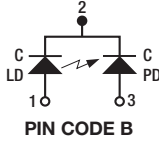


- Ø5.6 mm Package
- 20 mW (Typical) Optical Output Power (CW)
- 1.2 W/A (Typical) Slope Efficiency

S05LM9 Included

Pin Description

- 1 laser anode
- 2 common case (cathode)
- 3 monitor diode anode



NEW product

ITEM #	\$	£	€	RMB	DESCRIPTION
L375P020MLD*	CALL	CALL	CALL	CALL	Thorlabs 375 nm, 20 mW

*Ships with S05LM9, an SM05-compatible mount for Ø5.6 mm and Ø9 mm packages

Maximum Ratings ($T_c = 25 \text{ }^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	P_o	30 mW*
LD Reverse Voltage	$V_{R(LD)}$	5 V
PD Reverse Voltage	$V_{R(PD)}$	20 V
Operation Case Temperature	T_{op}	20 to 30 $^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to 85 $^\circ\text{C}$

*20 mW Typical

Characteristics ($T_c = 25 \text{ }^\circ\text{C}$, $P = 20 \text{ mW}$)

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	λ_p	370 nm	375 nm	380 nm
Threshold Current	I_{th}	–	45 mA	60 mA
Operating Current	I_{op}	–	60 mA	85 mA
Operating Voltage	V_{op}	4.5 V	5.2 V	6.5 V
Beam Divergence (FWHM)	$\theta_{//}$	5 $^\circ$	8.5 $^\circ$	13 $^\circ$
	θ_{\perp}	18 $^\circ$	22 $^\circ$	26 $^\circ$
Slope Efficiency	η_s	0.9 mW/mA	1.2 mW/mA	1.6 mW/mA
Monitor Current	I_m	–	0.2 mA	–

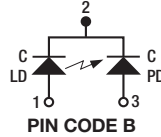
Note: All data are presented as typical unless otherwise specified.

$\lambda = 405 \text{ nm}$, $P = 5 \text{ mW}$, Single Mode Sanyo DL3146-151

- Ø5.6 mm Package
- 405 nm (Typical) Wavelength
- 5 mW Output Power (CW)
- 35 mA (Typical) Threshold Current

Pin Description

- 1 laser anode
- 2 common case (cathode)
- 3 monitor diode anode



ITEM #	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL3146-151	CALL	CALL	CALL	Sanyo 405 nm, 5 mW

Maximum Ratings ($T_c = 25 \text{ }^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	P_o	7 mW*
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operation Case Temperature	T_{op}	0 to 60 $^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to 85 $^\circ\text{C}$

*5 mW Typical

Characteristics ($T_c = 25 \text{ }^\circ\text{C}$, $P = 5 \text{ mW}$)

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	λ_p	400 nm	406 nm	413 nm
Threshold Current	I_{th}	–	33 mA	55 mA
Operating Current	I_{op}	–	40 mA	60 mA
Operating Voltage	V_{op}	–	5.0 V	6.0 V
Beam Divergence (FWHM)	$\theta_{//}$	6 $^\circ$	8 $^\circ$	14 $^\circ$
	θ_{\perp}	16 $^\circ$	20 $^\circ$	24 $^\circ$
Slope Efficiency	η_s	0.5 mW/mA	0.8 mW/mA	–
Monitor Current	I_m	0.1 mA	0.2 mA	1.0 mA

Note: All data are presented as typical unless otherwise specified.

$\lambda = 405 \text{ nm}$, $P = 10 \text{ mW}$, Single Mode Sanyo DL4146-101S

Maximum Ratings ($T_c = 25 \text{ }^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	P_o	20 mW*
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	–
Operation Case Temperature	T_{op}	0 to 75 $^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to 85 $^\circ\text{C}$

*10 mW Typical

Characteristics ($T_c = 25 \text{ }^\circ\text{C}$, $P = 10 \text{ mW}$)

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	λ_p	395 nm	405 nm	415 nm
Threshold Current	I_{th}	–	26 mA	50 mA
Operating Current	I_{op}	–	35 mA	60 mA
Operating Voltage	V_{op}	–	4.8 V	5.6 V
Beam Divergence (FWHM)	$\theta_{//}$	6 $^\circ$	8.5 $^\circ$	12 $^\circ$
	θ_{\perp}	16 $^\circ$	19 $^\circ$	23 $^\circ$
Slope Efficiency	η_s	0.7 mW/mA	1.1 mW/mA	–
Monitor Current	I_m	0.1 mA	0.2 mA	0.5 mA

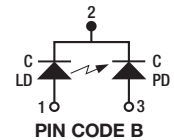
Note: All data are presented as typical unless otherwise specified.



NEW product

Pin Description

- 1 laser anode
- 2 common case (cathode)
- 3 monitor diode anode



- Ø5.6 mm Package
- 10 mW (Typical) Output Power (CW)
- 1.1 mW/mA (Typical) Slope Efficiency

ITEM #	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL4146-101S	CALL	CALL	CALL	Sanyo 405 nm, 10 mW