

## $\lambda = 405 \text{ nm}$ , $P = 40 \text{ mW}$ , Single Mode Sanyo DL5146-101S

**NEW**  
product

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

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	$P_o$	45 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 $85^\circ\text{C}$

\*40 mW Typical

### Characteristics ( $T_c = 25^\circ\text{C}$ , $P = 40 \text{ mW}$ )

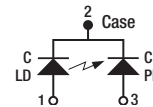
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	$\lambda_p$	395 nm	405 nm	415 nm
Threshold Current	$I_{th}$	—	35 mA	55 mA
Operating Current	$I_{op}$	—	70 mA	100 mA
Operating Voltage	$V_{op}$	—	5.2 V	5.7 V
Beam Divergence (FWHM)	$\theta_{//}$	$6^\circ$	$8^\circ$	$12^\circ$
	$\theta_{\perp}$	$16^\circ$	$19^\circ$	$23^\circ$
Slope Efficiency	$\eta_s$	0.8 mW/mA	1.2 mW/mA	—
Monitor Current	$I_m$	0.1 mA	0.3 mA	1.0 mA

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



#### Pin Description

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



PIN CODE B

- $\varnothing 5.6 \text{ mm}$  Package
- 40 mW (Typical) Output Power (CW)
- 1.2 mW/mA (Typical) Slope Efficiency

ITEM #	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL5146-101S	CALL	CALL	CALL	Sanyo 405 nm, 40 mW

## $\lambda = 405 \text{ nm}$ , $P = 120 \text{ mW}$ , Single Mode Mitsubishi ML320G2-11

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

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	$P_o$	120 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	—
Operation Case Temperature	$T_{op}$	5 to $80^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to $100^\circ\text{C}$

### Characteristics ( $T_c = 25^\circ\text{C}$ , $P = 120 \text{ mW}$ )

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	$\lambda_p$	400 nm	405 nm	410 nm
Threshold Current	$I_{th}$	—	45 mA	70 mA
Operating Current	$I_{op}$	—	120 mA	160 mA
Operating Voltage	$V_{op}$	—	5.0 V	6.0 V
Beam Divergence (FWHM)	$\theta_{//}$	$6^\circ$	$8^\circ$	$12^\circ$
	$\theta_{\perp}$	$15^\circ$	$17^\circ$	$21^\circ$
Slope Efficiency	$\eta_s$	1.3 mW/mA	1.7 mW/mA	2.0 mW/mA

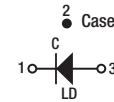
Note: All data are presented as typical unless otherwise specified.



**NEW**  
product

#### Pin Description

- 1 laser cathode
- 2 case
- 3 laser anode



PIN CODE G

- $\varnothing 5.6 \text{ mm}$  Package
- 405 nm (Typical) Wavelength
- 120 mW Output Power (CW)
- 45 mA (Typical) Threshold Current

ITEM #	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
ML320G2-11	CALL	CALL	CALL	Mitsubishi 405 nm, 120 mW

## $\lambda = 473 \text{ nm}$ , $P = 20 \text{ mW}$ , Single Mode Thorlabs L473P020MLD

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

CHARACTERISTIC	SYMBOL	MAX RATING
Optical Output Power (CW)	$P_o$	25 mW*
LD Reverse Voltage	$V_{R(LD)}$	5 V
PD Reverse Voltage	$V_{R(PD)}$	20 V
Operation Case Temperature	$T_{op}$	0 to $60^\circ\text{C}$
Storage Temperature	$T_{stg}$	-35 to $70^\circ\text{C}$

\*20 mW Typical

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

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Lasing Wavelength	$\lambda_p$	468 nm	473 nm	478 nm
Threshold Current	$I_{th}$	20 mA	50 mA	80 mA
Operating Current	$I_{op}$	50 mA	100 mA	150 mA
Operating Voltage	$V_{op}$	4.0 V	5.5 V	7.0 V
Beam Divergence (FWHM)	$\theta_{//}$	$5^\circ$	$9^\circ$	$13^\circ$
	$\theta_{\perp}$	$17^\circ$	$23^\circ$	$29^\circ$
Slope Efficiency	$\eta_s$	0.2 W/A	0.45 W/A	0.8 W/A
Monitor Current	$I_m$	0.1 mA	0.35 mA	0.8 mA

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



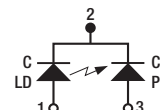
S05LM9 included



- $\varnothing 5.6 \text{ mm}$  Package
- 20 mW (Typical) Optical Output Power (CW)
- 0.45 W/A (Typical) Slope Efficiency

#### Pin Description

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



PIN CODE B

**NEW**  
product

ITEM #	\$	£	€	RMB	DESCRIPTION
L473P020MLD*	CALL	CALL	CALL	CALL	Thorlabs 473 nm, 20 mW

\*Ships with S05LM9, an SM05-compatible mount for  $\varnothing 5.6 \text{ mm}$  and  $\varnothing 9 \text{ mm}$  packages

473 nm  
Pigtailed  
Laser Diode



Available with  
Single Mode Fiber

See page  
1253