

Laser Viewing Cards

THORLABS

Detector Card

■ VRC2: 400 - 540 nm
800 - 1700 nm

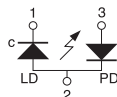
Always take appropriate safety precautions when working with lasers

See Page 1048

$\lambda = 850 \text{ nm}$, $P = 10 \text{ mW}$, Single Mode Thorlabs L850P010



Pin Description
1 laser cathode
2 common case
3 monitor diode anode



PIN CODE 5A

- Ø5.6 mm Package
- Index-Guided MQW Structure
- 11 μm (Typ.) Astigmatism
- 1 x 5 μm Emitter Size

ITEM#	£*	€*	RMB*
	1-5 PCS	1-5 PCS	1-5 PCS
L850P010	£ 15.12	€ 19.50	¥ 184.84

*For quantities over 5 pieces, please call a local office for pricing.

ITEM#	PRICE	PRICE	PRICE	DESCRIPTION
	1-5 PCS	6-10 PCS	11-20 PCS	
L850P010	\$ 21.90	\$ 19.71	\$ 17.52	Thorlabs 850 nm, 10 mW

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

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_o	10 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operating Temperature	T_{op}	-10 to 50 $^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to 85 $^\circ\text{C}$

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

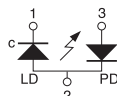
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	I_{th}	10 mA	25 mA	40 mA
Operation Current	I_{op}	25 mA	50 mA	70 mA
Operation Voltage	V_{op}	1.8 V	2.0 V	2.5 V
Slope Efficiency	η_s	0.3 mW/mA	0.5 mW/mA	0.7 mW/mA
Lasing Wavelength	λ_p	835 nm	850 nm	865 nm
Beam Divergence (FWHM)	$\theta//$	8 $^\circ$	10 $^\circ$	12 $^\circ$
	θ_{\perp}	25 $^\circ$	30 $^\circ$	40 $^\circ$
Astigmatism	A_s	-	11 μm	-
Monitor Current	I_m	0.05 mA	0.3 mA	1 mA

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

$\lambda = 850 \text{ nm}$, $P = 30 \text{ mW}$, Single Mode Thorlabs L850P030



Pin Description
1 laser cathode
2 common case
3 monitor diode anode



PIN CODE 5A

- Ø5.6 mm Package
- Index-Guided MQW Structure
- 1 x 5 μm Emitter Size
- 15 μm (Max) Astigmatism

ITEM#	£*	€*	RMB*
	1-5 PCS	1-5 PCS	1-5 PCS
L850P030	£ 56.93	€ 73.43	¥ 696.30

*For quantities over 5 pieces, please call a local office for pricing.

ITEM#	PRICE	PRICE	PRICE	DESCRIPTION
	1-5 PCS	6-10 PCS	11-20 PCS	
L850P030	\$ 82.50	\$ 74.25	\$ 66.00	Thorlabs 850 nm, 30 mW

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

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_o	30 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operating Temperature	T_{op}	-10 to 60 $^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to 85 $^\circ\text{C}$

Characteristics ($T_c = 25^\circ\text{C}$, $P = 30 \text{ mW}$)

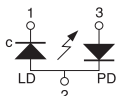
CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	I_{th}	-	20 mA	35 mA
Operation Current	I_{op}	-	65 mA	95 mA
Operation Voltage	V_{op}	-	2.0 V	2.5 V
Slope Efficiency	η_s	0.4 mW/mA	0.7 mW/mA	1.0 mW/mA
Lasing Wavelength	λ_p	840 nm	850 nm	860 nm
Beam Divergence (FWHM)	$\theta//$	7 $^\circ$	8.5 $^\circ$	12 $^\circ$
	θ_{\perp}	23 $^\circ$	30 $^\circ$	35 $^\circ$
Astigmatism	A_s	-	-	15 μm
Monitor Current	I_m	-	0.2 mA	0.5 mA

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

$\lambda = 850 \text{ nm}$, $P = 100 \text{ mW}$, Multimode Thorlabs L850P100



Pin Description
1 laser cathode
2 common case
3 monitor diode anode



PIN CODE 5A

- Ø5.6 mm Package
- Index-Guided MQW Structure
- Multimode
- 1 x 40 μm Emitter Size
- 11 μm (Typ.) Astigmatism

ITEM#	£*	€*	RMB*
	1-5 PCS	1-5 PCS	1-5 PCS
L850P100	£ 66.59	€ 85.89	¥ 814.46

*For quantities over 5 pieces, please call a local office for pricing.

ITEM #	PRICE	PRICE	PRICE	DESCRIPTION
	1-5 PCS	6-10 PCS	11-20 PCS	
L850P100	\$ 96.50	\$ 86.85	\$ 77.20	Thorlabs 850 nm, 100 mW

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

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_o	100 mW
LD Reverse Voltage	$V_{R(LD)}$	2 V
PD Reverse Voltage	$V_{R(PD)}$	30 V
Operating Temperature	T_{op}	-10 to 50 $^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to 85 $^\circ\text{C}$

Characteristics ($T_c = 25^\circ\text{C}$, $P = 100 \text{ mW}$)

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	I_{th}	50 mA	70 mA	90 mA
Operation Current	I_{op}	150 mA	200 mA	350 mA
Operation Voltage	V_{op}	1.8 V	2.0 V	2.5 V
Slope Efficiency	η_s	0.5 mW/mA	0.7 mW/mA	0.9 mW/mA
Lasing Wavelength	λ_p	835 nm	850 nm	865 nm
Beam Divergence (FWHM)	$\theta//$	8 $^\circ$	10 $^\circ$	12 $^\circ$
	θ_{\perp}	25 $^\circ$	30 $^\circ$	40 $^\circ$
Astigmatism	A_s	-	11 μm	-
Monitor Current	I_m	0.1 mA	0.3 mA	1.5 mA

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