

## λ = 830 nm, P = 100 mW, Single Mode Sanyo DL7032-001

Absolute Maximum Ratings (T<sub>c</sub> = 25 °C)

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P <sub>o</sub>	100 mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2 V
PD Reverse Voltage	V <sub>R(PD)</sub>	15 V
Operation Case Temperature	T <sub>c</sub>	-10 to 50 °C
Storage Temperature	T <sub>stg</sub>	-40 to 85 °C

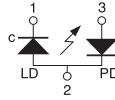
Characteristics (T<sub>c</sub> = 25 °C, P = 100 mW)

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	I <sub>th</sub>	–	50 mA	70 mA
Operation Current	I <sub>op</sub>	–	140 mA	180 mA
Operating Voltage	V <sub>op</sub>	–	1.9 V	2.4 V
Lasing Wavelength	λ <sub>p</sub>	810 nm	830 nm	840 nm
Slope Efficiency	η <sub>s</sub>	0.6 mW/mA	1 mW/mA	1.3 mW/mA
Beam Divergence (FWHM)	θ//	5°	7°	11°
	θ⊥	12°	18°	23°
Monitor Current	I <sub>m</sub>	0.05 mA	0.3 mA	–
Astigmatism	A <sub>s</sub>	–	10 μm	–

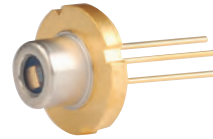
Note: All data is presented as typical unless otherwise specified.

### Pin Description

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



PIN CODE 9A



CAUTION: ELECTROSTATIC SENSITIVE

- Ø9 mm Package
- Single Longitudinal Mode
- 100 mW @ 50 °C High Output Power
- 140 mA (Typ.) Operating Current
- 10 μm Astigmatism

ITEM#	£*	€*	RMB*
DL7032-001	1-5 PCS £ 210.11	1-5 PCS € 271,01	1-5 PCS ¥ 2,569.98

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

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL7032-001	\$ 304.50	\$ 258.83	\$ 213.15	Sanyo 830 nm, 100 mW

## λ = 830 nm, P = 150 mW, Single Mode Sanyo DL8142-201

Absolute Maximum Ratings (T<sub>c</sub> = 25 °C)

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P <sub>o</sub>	180 mW
LD Reverse Voltage	V <sub>R(LD)</sub>	2 V
PD Reverse Voltage	V <sub>R(PD)</sub>	30 V
Operation Case Temperature	T <sub>c</sub>	-10 to 50 °C
Storage Temperature	T <sub>stg</sub>	-40 to 85 °C

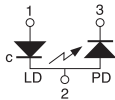
Characteristics (T<sub>c</sub> = 25 °C, P = 150 mW)

CHARACTERISTIC	SYMBOL	MIN	TYP.	MAX
Threshold Current	I <sub>th</sub>	–	50 mA	70 mA
Operation Current	I <sub>op</sub>	–	200 mA	250 mA
Operating Voltage	V <sub>op</sub>	–	1.9 V	2.2 V
Lasing Wavelength	λ <sub>p</sub>	815 nm	830 nm	840 nm
Beam Divergence (FWHM)	θ//	5°	8°	11°
	θ⊥	12°	16°	25°
Slope Efficiency	η <sub>s</sub>	0.7 mW/mA	1 mW/mA	–
Monitor Current	I <sub>m</sub>	0.15 mA	0.4 mA	1.0 mA

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

### Pin Description

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



PIN CODE 5C



CAUTION: ELECTROSTATIC SENSITIVE

- Ø5.6 mm Package
- 150 mW @ 50 °C Power Output
- <150 mW CW Recommended Usage
- 50 mA (Typ.) Threshold Current

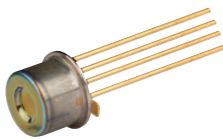
ITEM#	£*	€*	RMB*
DL8142-201	1-5 PCS £ 229.10	1-5 PCS € 295,50	1-5 PCS ¥ 2,802.10

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

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
DL8142-201	\$ 332.00	\$ 315.40	\$ 298.80	Sanyo 830 nm, 150 mW

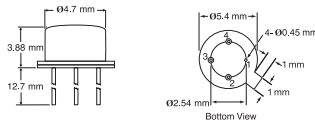
## λ = 845 nm, P = 1.85 mW, Multimode VCSEL-850

CAUTION: ELECTROSTATIC SENSITIVE



### Pin Description

- 1 Case
- 2 LD anode
- 3 LD cathode/PD anode
- 4 PD Cathode



Please refer to our website for complete models and drawings.

- Flat Window
- Monitor Photodiode
- High Speed 2.5Gbps
- Multimode

Absolute Maximum Ratings (T<sub>c</sub> = 25 °C)

CHARACTERISTIC	MIN	MAX	UNIT	CONDITION
Storage Temperature	-40	100	°C	–
Operating Temperature	0	85	°C	–
Continuous Forward Current	–	10	mA	–
Continuous Reverse Voltage	–	5	V	@ 10 A

Characteristics (T<sub>c</sub> = 25 °C)

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX	UNIT
Peak Wavelength*	λ <sub>p</sub>	830	845	860	nm
Spectral Width (RMS)*	Δλ	–	–	0.85	nm
Beam Divergence	θ	–	25	30	Deg
Forward Voltage*	V <sub>f</sub>	1.7	1.9	2.2	V
Threshold Current	I <sub>th</sub>	–	2.2	3	mA
Slope Efficiency*	η <sub>s</sub>	0.12	0.32	0.4	W/A
Optical Output Power*	P <sub>out</sub>	–	1.85	–	mW
Dynamic Resistance*	ΔV/ΔI	20	40	65	Ω
Rise / Fall Time	t <sub>r</sub> / t <sub>f</sub>	–	50	100	ps
Operating Temp. Range	T <sub>op</sub>	-5	25	80	°C
Monitor Current	I <sub>m</sub>	100	–	–	mA
Dark Current (V <sub>f</sub> = 10 V)	I <sub>r</sub>	–	0.2	1	nA
Shunt Resistance	P <sub>p</sub>	100	200	–	G Ω
Breakdown Voltage	V <sub>br</sub>	–	50	–	V
Junction Capacitance (@ V <sub>r</sub> = 10 V, 10 kHz)	C <sub>p</sub>	–	40	–	pF

\*Forward current = 8 mA@RT Note: All data is presented as typical unless otherwise specified

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
VCSEL-850	\$ 28.90	\$ 27.46	\$ 26.01	845 nm VCSEL, 1.85 mW

ITEM#	£*	€*	RMB*
VCSEL-850	1-5 PCS £ 19.95	1-5 PCS € 25,73	1-5 PCS ¥ 243.92

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

### Optical Filter Wheels



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