

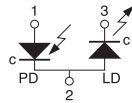
$\lambda = 635 \text{ nm}$, $P = 3 \text{ mW}$, Single Mode Hitachi HL6314MG

CAUTION:
ELECTROSTATIC
SENSITIVE



Pin Description

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



PIN CODE 5A

- $\varnothing 5.6 \text{ mm}$ Package
- AlGaInP Index-Guided MQW Structure
- Single Longitudinal Mode
- Low $8 \mu\text{m}$ Astigmatism @ 3 mW
- High Polarization Ratio $>350:1$ @ 3 mW

ITEM#	£*	€*	RMB*
	1-5 PCS	1-5 PCS	1-5 PCS
HL6314MG	£ 21.74	€ 28.04	¥ 265.90

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

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
HL6314MG	\$ 31.50	\$ 26.78	\$ 21.11	Hitachi 635 nm, 3 mW

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

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_O	3 mW
Pulsed Optical Power	$P_{O(\text{pulse})}$	5 mW*
LD Reverse Voltage	$V_{R(\text{PD})}$	2 V
PD Reverse Voltage	$V_{R(\text{LD})}$	30 V
Operation Case Temperature	T_C	-10 to $50 \text{ }^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to $85 \text{ }^\circ\text{C}$

*Pulse condition: Pulse width $\leq 1 \mu\text{s}$, Duty $\leq 50\%$

Characteristics ($T_C = 25 \text{ }^\circ\text{C}$, $P = 3 \text{ mW}$)

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX
Threshold Current	I_{th}	—	25 mA	35 mA
Operation Current	I_{op}	—	30 mA	42 mA
Operation Voltage	V_{op}	—	—	2.7 V
Lasing Wavelength	λ_p	630 nm	635 nm	640 nm
Beam Divergence (FWHM)	$\theta_{//}$	6°	8°	10°
	θ_{\perp}	23°	30°	39°
Monitor Current	I_m	0.08 mA	0.15 mA	0.40 mA

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

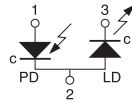
$\lambda = 635 \text{ nm}$, $P = 5 \text{ mW}$, Single Mode Hitachi HL6312G

- $\varnothing 9 \text{ mm}$ Package
- AlGaInP Index-Guided MQW Structure
- Single Longitudinal Mode
- Low $6 \mu\text{m}$ Astigmatism @ 5 mW
- High Polarization Ratio >400 @ 5 mW
- 6 mW Pulsed Optical Power with a 50% Duty Cycle and a Maximum Pulse Width of $1 \mu\text{s}$



Pin Description

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



PIN CODE 9A

ITEM#	£*	€*	RMB*
	1-5 PCS	1-5 PCS	1-5 PCS
HL6312G	£ 25.19	€ 32.49	¥ 308.06

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

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
HL6312G	\$ 36.50	\$ 31.03	\$ 24.46	Hitachi 635 nm, 5 mW

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

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_O	5 mW
Pulsed Optical Power	$P_{O(\text{pulse})}$	6 mW
LD Reverse Voltage	$V_{R(\text{PD})}$	2 V
PD Reverse Voltage	$V_{R(\text{LD})}$	30 V
Operation Case Temperature	T_C	-10 to $50 \text{ }^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to $85 \text{ }^\circ\text{C}$

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

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX
Threshold Current	I_{th}	20 mA	45 mA	70 mA
Operation Current	I_{op}	—	55 mA	85 mA
Operation Voltage	V_{op}	—	—	2.7 V
Lasing Wavelength	λ_p	625 nm	635 nm	640 nm
Beam Divergence (FWHM)	$\theta_{//}$	5°	8°	11°
	θ_{\perp}	25°	31°	37°
Monitor Current	I_m	0.2 mA	0.4 mA	0.8 mA

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

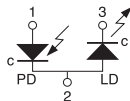
$\lambda = 635 \text{ nm}$, $P = 5 \text{ mW}$, Single Mode Hitachi HL6335G

CAUTION:
ELECTROSTATIC
SENSITIVE



Pin Description

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



PIN CODE 9A

- $\varnothing 9 \text{ mm}$ Package
- 5 mW (Min) Operating Current
- TM Mode Oscillation
- Single Longitudinal Mode

ITEM#	£*	€*	RMB*
	1-5 PCS	1-5 PCS	1-5 PCS
HL6335G	£ 34.16	€ 44.06	¥ 417.80

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

ITEM#	PRICE 1-5 PCS	PRICE 6-10 PCS	PRICE 11-20 PCS	DESCRIPTION
HL6335G	\$ 49.50	\$ 42.08	\$ 33.17	Hitachi 635 nm, 5 mW

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

CHARACTERISTIC	SYMBOL	RATING
Optical Output Power (CW)	P_O	5 mW
Pulsed Optical Output Power	$P_{O(\text{Pulse})}$	6 mW*
LD Reverse Voltage	$V_{R(\text{LD})}$	2 V
PD Reverse Voltage	$V_{R(\text{PD})}$	30 V
Operation Case Temperature	T_C	-10 to $+50 \text{ }^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to $+85 \text{ }^\circ\text{C}$

*Note: Pulse condition: Pulse width $\leq 1 \mu\text{s}$, duty = 50%

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

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX
Optical Output Power	P_O	5 mW	—	—
Threshold Current	I_{th}	—	20 mA	30 mA
Slope Efficiency	η_s	0.5 mW/mA	0.8 mW/mA	1.1 mW/mA
Operation Current	I_{op}	—	25 mA	40 mA
Operation Voltage	V_{op}	—	2.4 V	2.7 V
Lasing Wavelength	λ_p	630 nm	635 nm	640 nm
Beam Divergence (FWHM)	$\theta_{//}$	13°	17°	25°
	θ_{\perp}	16°	20°	25°
Aspect Ratio	$\theta_{\perp}/\theta_{//}$	—	1.2	1.5
Monitor Current	I_m	0.03 mA	0.07 mA	0.12 mA

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