

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

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

| CHARACTERISTIC | SYMBOL | MAX RATING |
|----------------------------|-----------------------|---------------------------|
| Optical Output Power (CW) | P_o | 5 mW |
| Pulsed Optical 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_{op} | -10 to 50°C |
| Storage Temperature | T_{stg} | -40 to 85°C |

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

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

| CHARACTERISTIC | SYMBOL | MIN | TYP. | MAX |
|------------------------|------------------|------------|------------|------------|
| Lasing Wavelength | λ_p | 625 nm | 635 nm | 640 nm |
| Threshold Current | I_{th} | 20 mA | 45 mA | 70 mA |
| Operating Current | I_{op} | — | 55 mA | 85 mA |
| Operating Voltage | V_{op} | — | — | 2.7 V |
| 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 are presented as typical unless otherwise specified.

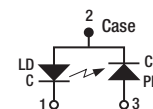
- $\varnothing 9 \text{ mm}$ Package
- AlGaInP Index-Guided MQW Structure
- Single Longitudinal Mode
- Low $6 \mu\text{m}$ Astigmatism @ 5 mW
- High Polarization Ratio >400 @ 5 mW
- 6 mW Pulsed Optical Power with a 50% Duty Cycle and a Maximum Pulse Width of $1 \mu\text{s}$

CAUTION:
ELECTROSTATIC SENSITIVE



Pin Description

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



PIN CODE A

| ITEM # | £* | €* | RMB* |
|---------|---------|---------|----------|
| | 1-5 PCS | 1-5 PCS | 1-5 PCS |
| HL6312G | £ 27.08 | € 32.72 | ¥ 299.68 |

*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 | \$ 37.60 | \$ 36.47 | \$ 35.72 | Hitachi 635 nm, 5 mW |

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

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

| CHARACTERISTIC | SYMBOL | MAX RATING |
|----------------------------|-----------------------|---------------------------|
| Optical Output Power (CW) | P_o | 5 mW |
| Pulsed Optical 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_{op} | -10 to 50°C |
| Storage Temperature | T_{stg} | -40 to 85°C |

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

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

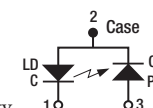
Note: All data are presented as typical unless otherwise specified.

CAUTION:
ELECTROSTATIC SENSITIVE



Pin Description

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



PIN CODE A

- $\varnothing 9 \text{ mm}$ Package
- 5 mW (Min) Operating Current
- TM Mode Oscillation
- Single Longitudinal Mode
- 6 mW Pulsed Optical Power with a 50% Duty Cycle and a Maximum Pulse Width of $1 \mu\text{s}$

| ITEM # | £* | €* | RMB* |
|---------|---------|---------|----------|
| | 1-5 PCS | 1-5 PCS | 1-5 PCS |
| HL6335G | £ 36.72 | € 44.37 | ¥ 406.47 |

*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 | \$ 51.00 | \$ 49.47 | \$ 48.45 | Hitachi 635 nm, 5 mW |

$\lambda = 635 \text{ nm}$, $P = 5 \text{ mW}$, Single Mode Sanyo DL3148-025

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

| CHARACTERISTIC | SYMBOL | MAX RATING |
|----------------------------|--------------------|---------------------------|
| Optical Output Power (CW) | P_o | 6 mW* |
| LD Reverse Voltage | $V_{R(\text{LD})}$ | 2 V |
| PD Reverse Voltage | $V_{R(\text{PD})}$ | 30 V |
| Operation Case Temperature | T_{op} | -10 to 40°C |
| Storage Temperature | T_{stg} | -40 to 85°C |

*5 mW Typical

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

| CHARACTERISTIC | SYMBOL | MIN | TYP. | MAX |
|------------------------|------------------|------------|-----------------|------------|
| Lasing Wavelength | λ_p | 630 nm | 635 nm | 640 nm |
| Threshold Current | I_{th} | — | 20 mA | 35 mA |
| Operating Current | I_{op} | — | 30 mA | 45 mA |
| Operating Voltage | V_{op} | — | 2.2 V | 2.4 V |
| Beam Divergence (FWHM) | $\theta_{//}$ | 6° | 8° | 10° |
| | θ_{\perp} | 25° | 30° | 35° |
| Astigmatism | A_s | — | $8 \mu\text{m}$ | — |
| Monitor Current | I_m | 0.08 mA | 0.2 mA | 0.5 mA |

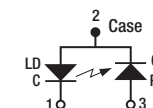
Note: All data are presented as typical unless otherwise specified.

CAUTION:
ELECTROSTATIC SENSITIVE



Pin Description

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



PIN CODE A

- $\varnothing 5.6 \text{ mm}$ Package
- 20 mA (Typical) Threshold Current
- 2.2 V (Typical) Operating Voltage
- Ideal for Laser Pointer Applications

| ITEM # | £* | €* | RMB* |
|------------|---------|---------|----------|
| | 1-5 PCS | 1-5 PCS | 1-5 PCS |
| DL3148-025 | £ 13.61 | € 16.45 | ¥ 150.64 |

*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 |
|------------|---------------|----------------|-----------------|-------------------|
| DL3148-025 | \$ 18.90 | \$ 18.33 | \$ 17.96 | Sanyo 635 nm, 5mW |

635 nm
Pigtailed
Laser Diodes



Available in SM,
PM, and MM
Versions

See page
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