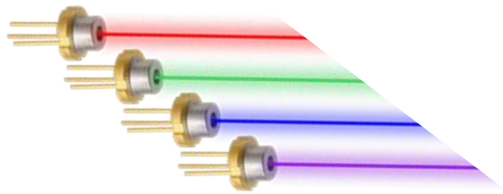


# LASER Diode

Line up



April 2026

Foxconn Fukuyama Technologies Co., Ltd.

 [Contact](#)



# LASER Diode Lineup

Precautions regarding laser

[Click](#)

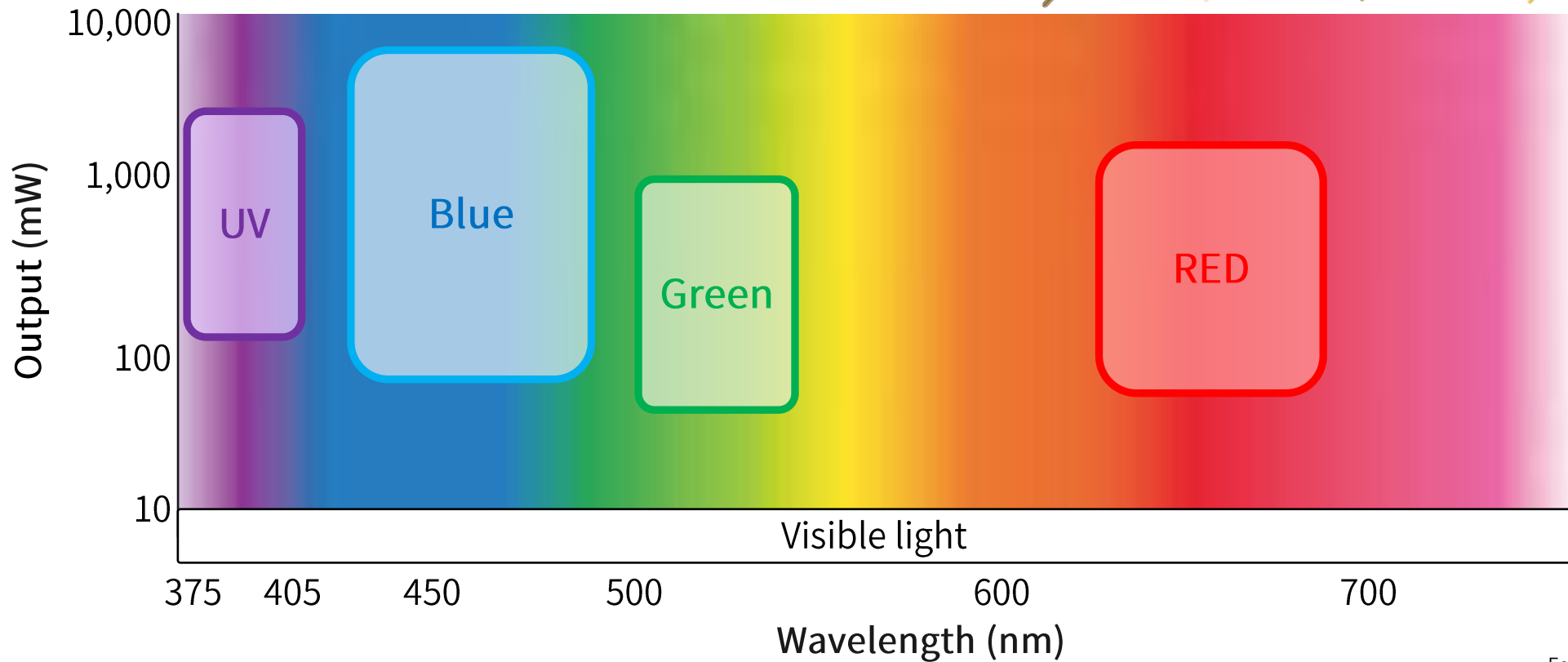
## Output / Wavelength deployment

[Click](#) on your desired wavelength band.

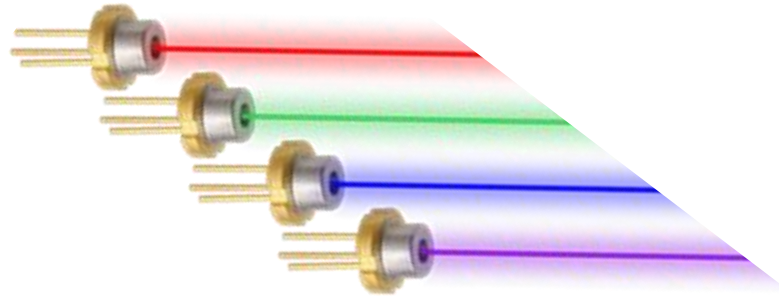
## Package deployment

[Click](#) on your preferred package.

- [Φ 9.0 CAN](#)
- [Φ 5.6 CAN](#)
- [Φ 3.8 CAN](#)
- [Φ 3.3 CAN](#)
- [T1.8mm Frame](#)



# Lineup by Wavelength



# UV Laser Diode

[Contact](#)



○ New product   ● Under development

| Model name<br>[mode] <sup>*4</sup> |             |                     | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(Tc=25°C) |             |             |            |                     |                               |                                |                      |                         |            | Absolute maximum rating <sup>*1</sup> |             |          | Package<br>(mm) | Monitor PD<br>(Built-in:○) |   |
|------------------------------------|-------------|---------------------|-----------------------------------|------------------------------|-------------|-------------|------------|---------------------|-------------------------------|--------------------------------|----------------------|-------------------------|------------|---------------------------------------|-------------|----------|-----------------|----------------------------|---|
|                                    |             |                     |                                   | Po<br>(mW)                   | Ith<br>(mA) | Iop<br>(mA) | Vop<br>(V) | $\eta_d$<br>(mW/mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu$ m) | FFP                  |                         | Po<br>(mW) | Iop<br>(mA)                           | Top<br>(°C) |          |                 |                            |   |
|                                    |             |                     |                                   |                              |             |             |            |                     |                               |                                | $\theta_{//}$<br>(°) | $\theta_{\perp}$<br>(°) |            |                                       |             |          |                 |                            |   |
| ● GH0382AA2G                       | MM          | <a href="#">PDF</a> | 380                               | 200                          | 200         | 325         | 4.4        | -                   | 380                           | 7                              | 15                   | 36                      | *3         | 210                                   | -           | 0 to +30 | $\phi$ 5.6      | -                          |   |
|                                    | GH0393AA2G  | MM                  | <a href="#">PDF</a>               | 395                          | 300         | 150         | 310        | 4.4                 | 1.8                           | 395                            | 7                    | 13                      | 44         | *3                                    | 350         | -        | 0 to +30        | $\phi$ 5.6                 | - |
|                                    | GH0401FA2G  | SM                  | <a href="#">PDF</a>               | 405                          | 150         | 40          | 130        | 5.0                 | 1.7                           | 405                            | 1.25                 | 9                       | 19         | *2                                    | 155         | -        | -10 to +75      | $\phi$ 5.6                 | - |
|                                    | GH04V01A2GC | MM                  | <a href="#">PDF</a>               | 405                          | 1000        | 150         | 650        | 5.0                 | 2.0                           | 405                            | 10                   | 16                      | 40         | *3                                    | 1100        | -        | 0 to +30        | $\phi$ 5.6                 | - |
| ●                                  | GH04V03Z9G  | MM                  | <a href="#">PDF</a>               | 405                          | 3000        | 450         | 1800       | 4.0                 | 2.0                           | 405                            | 30                   | 8                       | 40         | *3                                    | -           | 2000     | 0 to +30        | $\phi$ 9.0                 | - |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions.

\*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity

\*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# Blue Laser Diode



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |                         |    | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                     |                               |                                |      |    | Absolute maximum rating <sup>*1</sup> |                         |             | Package<br>(mm) | Monitor<br>PD<br>(Built-in:○) |            |   |
|------------------------------------|-------------------------|----|-----------------------------------|---|-------------------------|-------------------------|------------------------|---------------------|-------------------------------|--------------------------------|------|----|---------------------------------------|-------------------------|-------------|-----------------|-------------------------------|------------|---|
|                                    |                         |    |                                   | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | $\eta_d$<br>(mW/mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu$ m) | FFP  |    | P <sub>o</sub><br>(mW)                | I <sub>op</sub><br>(mA) | Top<br>(°C) |                 |                               |            |   |
| $\theta_{//}$<br>(°)               | $\theta_{\perp}$<br>(°) |    |                                   |   |                         |                         |                        |                     |                               |                                |      |    |                                       |                         |             |                 |                               |            |   |
| ●                                  | GH04I01A2G              | MM | <a href="#">PDF</a>               | 425                                       | 1500                    | 120                     | 850                    | 4.2                 | -                             | 425                            | 15   | 8  | 47                                    | *3                      | 1600        | -               | 0 to +30                      | $\phi$ 5.6 | - |
| ●                                  | GH04C06W9G              | MM | <a href="#">PDF</a>               | 435                                       | 6000                    | 300                     | 3000                   | 4.2                 | 2.0                           | 430                            | 45   | 7  | 45                                    | *3                      | -           | 3300            | *5(0) to +60                  | $\phi$ 9.0 | - |
| ●                                  | GH04C07W9G              | MM | <a href="#">PDF</a>               | 435                                       | 7000                    | 360                     | 4000                   | 4.3                 | 1.9                           | 435                            | 60   | 8  | 47                                    | *3                      | -           | 4200            | *5(0) to +60                  | $\phi$ 9.0 | - |
| ●                                  | GH04550A2G              | SM | <a href="#">PDF</a>               | 450                                       | 50                      | 22                      | 60                     | 4.8                 | 1.3                           | 450                            | 1.25 | 8  | 24                                    | *2                      | 55          | -               | 10 to +60                     | $\phi$ 5.6 | - |
|                                    | GH04580A2G              | SM | <a href="#">PDF</a>               | 450                                       | 80                      | 22                      | 84                     | 5.1                 | 1.3                           | 450                            | 1.25 | 10 | 24                                    | *2                      | 85          | -               | -10 to +70                    | $\phi$ 5.6 | - |
| ○                                  | GH04C01C2G              | MM | <a href="#">PDF</a>               | 450                                       | 1000                    | 100                     | 680                    | 4.3                 | 1.7                           | 450                            | 15   | 10 | 45                                    | *3                      | 1100        | -               | -10 to +25                    | $\phi$ 5.6 | - |
|                                    | GH04C01B2G              | MM | <a href="#">PDF</a>               | 450                                       | 1800                    | 110                     | 1100                   | 4.1                 | 1.8                           | 450                            | 15   | 7  | 26                                    | *2                      | 2000        | -               | -10 to +50                    | $\phi$ 5.6 | - |
|                                    | GH04C03Z9G              | MM | <a href="#">PDF</a>               | 450                                       | 3500                    | 260                     | 2100                   | 4.4                 | 1.9                           | 450                            | 30   | 9  | 47                                    | *3                      | -           | 2800            | 0 to +60                      | $\phi$ 9.0 | - |
|                                    | GH04C05U9G              | MM | <a href="#">PDF</a>               | 450                                       | 5000                    | 300                     | 2950                   | 4.1                 | 1.8                           | 450                            | 45   | 9  | 46                                    | *3                      | -           | 3200            | 0 to +60                      | $\phi$ 9.0 | - |
|                                    | GH04850B2G              | SM | <a href="#">PDF</a>               | 487                                       | 50                      | 40                      | 105                    | 6.0                 | 0.8                           | 487                            | 1.55 | 8  | 23                                    | *2                      | 55          | -               | -10 to +60                    | $\phi$ 5.6 | - |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions. \*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity \*4 MM: Multimode, SM: Single mode. \*5 Please contact us.

※ Please contact us for combinations of packages and characteristics other than the above.

# Green Laser Diode

[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(Tc=25°C) |             |             |            |                     |                               |                                       |                      |                         |            | Absolute maximum rating <sup>*1</sup> |             |            | Package<br>(mm) | Monitor<br>PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|-----------------------------------|------------------------------|-------------|-------------|------------|---------------------|-------------------------------|---------------------------------------|----------------------|-------------------------|------------|---------------------------------------|-------------|------------|-----------------|-------------------------------|
|                                    |    |                     |                                   | Po<br>(mW)                   | Ith<br>(mA) | Iop<br>(mA) | Vop<br>(V) | $\eta_d$<br>(mW/mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu\text{m}$ ) | FFP                  |                         | Po<br>(mW) | Iop<br>(mA)                           | Top<br>(°C) |            |                 |                               |
|                                    |    |                     |                                   |                              |             |             |            |                     |                               |                                       | $\theta_{//}$<br>(°) | $\theta_{\perp}$<br>(°) |            |                                       |             |            |                 |                               |
| ○ GH05230H1G                       | SM | <a href="#">PDF</a> | 518                               | 30                           | 25          | 75          | 6.2        | 0.6                 | 518                           | 1.8                                   | 7.5                  | 22                      | *2         | 35                                    | -           | -10 to +60 | $\phi$ 5.6      | -                             |
| GH05210H2KC                        | SM | <a href="#">PDF</a> | 520                               | 10                           | 25          | 35          | 5.8        | 0.7                 | 520                           | 1.8                                   | 7                    | 22                      | *2         | 15                                    | -           | -10 to +60 | $\phi$ 5.6      | ○                             |
| GH05210H5K                         | SM | <a href="#">PDF</a> | 520                               | 10                           | 25          | 35          | 5.8        | 0.7                 | 520                           | 1.8                                   | 7                    | 22                      | *2         | 15                                    | -           | -10 to +70 | $\phi$ 3.8      | ○                             |
| GH05230H2KC                        | SM | <a href="#">PDF</a> | 520                               | 30                           | 25          | 70          | 6.5        | 0.7                 | 520                           | 1.8                                   | 7                    | 22                      | *2         | 35                                    | -           | -10 to +60 | $\phi$ 5.6      | ○                             |
| GH05250F2K                         | SM | <a href="#">PDF</a> | 520                               | 50                           | 40          | 100         | 5.9        | 0.7                 | 520                           | 1.85                                  | 7                    | 22                      | *2         | 55                                    | -           | -10 to +60 | $\phi$ 5.6      | ○                             |
| GH05280E2KC                        | SM | <a href="#">PDF</a> | 520                               | 80                           | 50          | 150         | 6.5        | 0.8                 | 520                           | 1.85                                  | 7                    | 23                      | *2         | 85                                    | -           | -10 to +60 | $\phi$ 5.6      | ○                             |
| ● GH05280E5K                       | SM | <a href="#">PDF</a> | 520                               | 80                           | 65          | 180         | 6.5        | 0.7                 | 520                           | 1.85                                  | 7                    | 23                      | *2         | 85                                    | -           | -10 to +60 | $\phi$ 3.8      | ○                             |
| GH0521DE2G                         | SM | <a href="#">PDF</a> | 520                               | 130                          | 70          | 270         | 6.7        | 0.7                 | 520                           | 1.8                                   | 8                    | 22                      | *2         | 135                                   | -           | -10 to +60 | $\phi$ 5.6      | -                             |
| GH0523AD2G                         | MM | <a href="#">PDF</a> | 520                               | 300                          | 100         | 500         | 5.2        | 0.8                 | 520                           | 15                                    | 7                    | 23                      | *2         | -                                     | 850         | 0 to +60   | $\phi$ 5.6      | -                             |
| ● GH05C01A9G                       | MM | <a href="#">PDF</a> | 520                               | 600                          | 180         | 840         | 4.4        | 0.9                 | 520                           | 15                                    | 9                    | 44                      | *3         | -                                     | -           | 0 to +60   | $\phi$ 9.0      | -                             |
| ● GH05C01D9G                       | MM | <a href="#">PDF</a> | 525                               | 1300                         | 250         | 1400        | 4.3        | 1.1                 | 525                           | 15                                    | 8                    | 42                      | *3         | -                                     | -           | 0 to +60   | $\phi$ 9.0      | -                             |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions. \*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity \*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# Red Laser Diode



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(Tc=25°C) |             |             |            |                     |                               |                                |                      |                         |            | Absolute maximum rating <sup>*1</sup> |             |            | Package<br>(mm) | Monitor<br>PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|-----------------------------------|------------------------------|-------------|-------------|------------|---------------------|-------------------------------|--------------------------------|----------------------|-------------------------|------------|---------------------------------------|-------------|------------|-----------------|-------------------------------|
|                                    |    |                     |                                   | Po<br>(mW)                   | Ith<br>(mA) | Iop<br>(mA) | Vop<br>(V) | $\eta_d$<br>(mW/mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu$ m) | FFP                  |                         | Po<br>(mW) | Iop<br>(mA)                           | Top<br>(°C) |            |                 |                               |
|                                    |    |                     |                                   |                              |             |             |            |                     |                               |                                | $\theta_{//}$<br>(°) | $\theta_{\perp}$<br>(°) |            |                                       |             |            |                 |                               |
| GH0637AA2G                         | MM | <a href="#">PDF</a> | 638                               | 700                          | 110         | 810         | 2.5        | 1.0                 | 638                           | -                              | 16                   | 35                      | *2         | 702                                   | -           | -10 to +30 | $\phi$ 5.6      | -                             |
| ● GH0631IB2GC                      | SM | <a href="#">PDF</a> | 639                               | 180                          | 55          | 215         | 2.7        | 1.2                 | 639                           | -                              | 8                    | 15                      | *2         | 185                                   | -           | -10 to +60 | $\phi$ 5.6      | -                             |
| GH06510F4AK                        | SM | <a href="#">PDF</a> | 660                               | 7                            | 17          | 26          | 2.2        | 0.9                 | 660                           | -                              | 13                   | 28                      | *2         | 10                                    | -           | -10 to +70 | $\phi$ 3.3      | ○                             |
| GH06610A2KC                        | SM | <a href="#">PDF</a> | 660                               | 10                           | 15          | 24          | 2.2        | 1.1                 | 660                           | -                              | 12                   | 33                      | *2         | 12                                    | -           | -40 to +90 | $\phi$ 5.6      | ○                             |
| GH06P25A2CC                        | SM | <a href="#">PDF</a> | 660                               | 95                           | 40          | 122         | 2.4        | 1.1                 | 660                           | -                              | 10                   | 15.5                    | *2         | 100                                   | -           | -10 to +70 | $\phi$ 5.6      | -                             |
| GH16P32B8C                         | SM | <a href="#">PDF</a> | 661                               | 90                           | 42          | 120         | 2.3        | 1.2                 | 661                           | -                              | 9.3                  | 15                      | *2         | 100                                   | -           | -10 to +70 | t1.8            | -                             |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions. \*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e2 of peak intensity \*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# 2 Wavelength Laser Diode

[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                     |                               |                                |                      |                         |                        | Absolute maximum rating <sup>*1</sup> |                         |            | Package<br>(mm) | Monitor PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|-----------------------------------|---|-------------------------|-------------------------|------------------------|---------------------|-------------------------------|--------------------------------|----------------------|-------------------------|------------------------|---------------------------------------|-------------------------|------------|-----------------|----------------------------|
|                                    |    |                     |                                   | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | $\eta_d$<br>(mW/mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu$ m) | FFP                  |                         | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)               | T <sub>op</sub><br>(°C) |            |                 |                            |
|                                    |    |                     |                                   |   |                         |                         |                        |                     |                               |                                | $\theta_{//}$<br>(°) | $\theta_{\perp}$<br>(°) |                        |                                       |                         |            |                 |                            |
| GH33235A8CN<br>(Two-Wavelength)    | SM | <a href="#">PDF</a> | 661                               | 90  | 50                      | 134                     | 2.4                    | 1.1                 | 661                           | -                              | 8-11.5               | 13.5-19                 | *2                     | 90                                    | -                       | -10 to +85 | t1.8            | -                          |
|                                    |    |                     | 785                               | 150                                       | 53                      | 215                     | 2.4                    | 0.9                 | 785                           |                                | 7-10.5               | 13-18                   |                        | 160                                   |                         |            |                 |                            |
| GH33540D8C5<br>(Two-Wavelength)    | SM | <a href="#">PDF</a> | 661                               | 120                                       | 68                      | 189                     | 2.5                    | 1.0                 | 661                           | -                              | 8.5-11.5             | 14-19                   | *2                     | 125                                   | -                       | -10 to +80 | t1.8            | -                          |
|                                    |    |                     | 785                               | 150                                       | 55                      | 230                     | 2.4                    | 0.9                 | 785                           |                                | 7-10.5               | 13-18                   |                        | 200                                   |                         |            |                 |                            |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions. \*2 Overall width angle at 1/2 of peak intensity

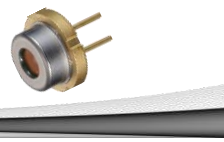
\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity \*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# Lineup by Package



# φ9.0mm TO-CAN Package



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>λ <sub>p</sub><br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                               |                                  |                          |                        |                       |                        | Absolute<br>maximum rating <sup>*1</sup> |             |          | Monitor<br>PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|--------------------------------------|---|-------------------------|-------------------------|------------------------|-------------------------------|----------------------------------|--------------------------|------------------------|-----------------------|------------------------|--|-------------|----------|-------------------------------|
|                                    |    |                     |                                      | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | η <sub>d</sub><br>(mW/<br>mA) | (Peak)<br>λ <sub>p</sub><br>(nm) | Emitter<br>width<br>(μm) | FFP                    |                       | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)                  | Top<br>(°C) |          |                               |
|                                    |    |                     |                                      |   |                         |                         |                        |                               |                                  |                          | θ <sub>//</sub><br>(°) | θ <sub>⊥</sub><br>(°) |                        |  |             |          |                               |
| ● GH04V03Z9G                       | MM | <a href="#">PDF</a> | 405                                  | 3000                                      | 450                     | 1800                    | 4.0                    | 2.0                           | 405                              | 30                       | 8                      | 40                    | *3                     | -  | 2000        | 0 to +30 | -                             |
| ● GH04C06W9G                       | MM | <a href="#">PDF</a> | 435                                  | 6000                                      | 300                     | 3000                    | 4.2                    | 2.0                           | 430                              | 47                       | 7                      | 45                    | *3                     | -  | 3300        | 0 to +60 | -                             |
| ● GH04C07W9G                       | MM | <a href="#">PDF</a> | 435                                  | 7000                                      | 360                     | 4000                    | 4.3                    | 1.9                           | 435                              | 60                       | 8                      | 47                    | *3                     | -  | 4200        | 0 to +60 | -                             |
| GH04C03Z9G                         | MM | <a href="#">PDF</a> | 450                                  | 3500                                      | 260                     | 2100                    | 4.4                    | 1.9                           | 450                              | 30                       | 9                      | 47                    | *3                     | -  | 2800        | 0 to +60 | -                             |
| GH04C05U9G                         | MM | <a href="#">PDF</a> | 450                                  | 5000                                      | 300                     | 2950                    | 4.1                    | 1.8                           | 450                              | 47                       | 9                      | 46                    | *3                     | -  | 3200        | 0 to +60 | -                             |
| ● GH05C01A9G                       | MM | <a href="#">PDF</a> | 520                                  | 600                                       | 180                     | 840                     | 4.4                    | 0.9                           | 520                              | 15                       | 9                      | 44                    | *3                     | -  | -           | 0 to +60 | -                             |
| ● GH05C01D9G                       | MM | <a href="#">PDF</a> | 525                                  | 1300                                      | 250                     | 1400                    | 4.3                    | 1.1                           | 525                              | 15                       | 8                      | 42                    | *3                     | -  | -           | 0 to +60 | -                             |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions.

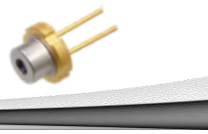
\*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity

\*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# φ5.6mm TO-CAN Package



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>λ <sub>p</sub><br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                               |                                  |                          |                        |                       |                        | Absolute<br>maximum rating <sup>*1</sup> |             |            | Monitor<br>PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|--------------------------------------|---|-------------------------|-------------------------|------------------------|-------------------------------|----------------------------------|--------------------------|------------------------|-----------------------|------------------------|--|-------------|------------|-------------------------------|
|                                    |    |                     |                                      | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | η <sub>d</sub><br>(mW/<br>mA) | (Peak)<br>λ <sub>p</sub><br>(nm) | Emitter<br>width<br>(μm) | FFP                    |                       | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)                  | Top<br>(°C) |            |                               |
|                                    |    |                     |                                      |   |                         |                         |                        |                               |                                  |                          | θ <sub>//</sub><br>(°) | θ <sub>⊥</sub><br>(°) |                        |  |             |            |                               |
| ● GH0382AA2G                       | MM | <a href="#">PDF</a> | 380                                  | 200                                       | 200                     | 325                     | 4.4                    | -                             | 380                              | 7                        | 15                     | 36                    | *3                     | 210                                      | -           | 0 to +30   | -                             |
| GH0393AA2G                         | MM | <a href="#">PDF</a> | 395                                  | 300                                       | 150                     | 310                     | 4.4                    | 1.8                           | 395                              | 7                        | 13                     | 44                    | *3                     | 350                                      | -           | 0 to +30   | -                             |
| GH0401FA2G                         | SM | <a href="#">PDF</a> | 405                                  | 150                                       | 40                      | 130                     | 5.0                    | 1.7                           | 405                              | 1.25                     | 9                      | 19                    | *2                     | 155                                      | -           | -10 to +75 | -                             |
| GH04V01A2GC                        | MM | <a href="#">PDF</a> | 405                                  | 1000                                      | 150                     | 650                     | 5.0                    | 2.0                           | 405                              | 10                       | 16                     | 40                    | *3                     | 1100                                     | -           | 0 to +30   | -                             |
| ● GH04I01A2G                       | MM | <a href="#">PDF</a> | 425                                  | 1500                                      | 120                     | 850                     | 4.2                    | -                             | 425                              | 15                       | 8                      | 47                    | *3                     | 1600                                     | -           | 0 to +30   | -                             |
| ● GH04550A2G                       | SM | <a href="#">PDF</a> | 450                                  | 50  | 22                      | 60                      | 4.8                    | 1.3                           | 450                              | 1.25                     | 8                      | 24                    | *2                     | 55                                       | -           | 10 to +60  | -                             |
| GH04580A2G                         | SM | <a href="#">PDF</a> | 450                                  | 80  | 22                      | 84                      | 5.1                    | 1.3                           | 450                              | 1.25                     | 10                     | 24                    | *2                     | 85                                       | -           | -10 to +70 | -                             |
| ○ GH04C01C2G                       | MM | <a href="#">PDF</a> | 450                                  | 1000                                      | 100                     | 680                     | 4.3                    | 1.7                           | 450                              | 15                       | 10                     | 45                    | *3                     | 1100                                     | -           | -10 to +25 | -                             |
| GH04C01B2G                         | MM | <a href="#">PDF</a> | 450                                  | 1800                                      | 110                     | 1100                    | 4.1                    | 1.8                           | 450                              | 15                       | 7                      | 26                    | *2                     | 2000                                     | -           | -10 to +50 | -                             |
| GH04850B2G                         | SM | <a href="#">PDF</a> | 487                                  | 50  | 40                      | 105                     | 6.0                    | 0.8                           | 487                              | 1.55                     | 8                      | 23                    | *2                     | 55                                       | -           | -10 to +60 | -                             |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions.

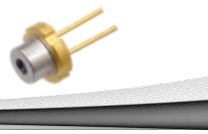
\*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity

\*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# φ5.6mm TO-CAN Package



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                         |                               |                                |                      |                         |                        | Absolute<br>maximum rating <sup>*1</sup> |                         |            | Monitor<br>PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|-----------------------------------|---|-------------------------|-------------------------|------------------------|-------------------------|-------------------------------|--------------------------------|----------------------|-------------------------|------------------------|--|-------------------------|------------|-------------------------------|
|                                    |    |                     |                                   | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | $\eta_d$<br>(mW/<br>mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu$ m) | FFP                  |                         | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)                  | T <sub>op</sub><br>(°C) |            |                               |
|                                    |    |                     |                                   |   |                         |                         |                        |                         |                               |                                | $\theta_{//}$<br>(°) | $\theta_{\perp}$<br>(°) |                        |  |                         |            |                               |
| ○ GH05230H1G                       | SM | <a href="#">PDF</a> | 518                               | 30  | 25                      | 75                      | 6.2                    | 0.6                     | 518                           | 1.8                            | 7.5                  | 22                      | *2                     | 35                                       | -                       | -10 to +60 | -                             |
| GH05210H2KC                        | SM | <a href="#">PDF</a> | 520                               | 10  | 25                      | 35                      | 5.8                    | 0.7                     | 520                           | 1.8                            | 7                    | 22                      | *2                     | 15                                       | -                       | -10 to +60 | ○                             |
| GH05230H2KC                        | SM | <a href="#">PDF</a> | 520                               | 30  | 25                      | 70                      | 6.5                    | 0.7                     | 520                           | 1.8                            | 7                    | 22                      | *2                     | 35                                       | -                       | -10 to +60 | ○                             |
| GH05250F2K                         | SM | <a href="#">PDF</a> | 520                               | 50  | 40                      | 100                     | 5.9                    | 0.7                     | 520                           | 1.85                           | 7                    | 22                      | *2                     | 55                                       | -                       | -10 to +60 | ○                             |
| GH05280E2KC                        | SM | <a href="#">PDF</a> | 520                               | 80  | 50                      | 150                     | 6.5                    | 0.8                     | 520                           | 1.85                           | 7                    | 23                      | *2                     | 85                                       | -                       | -10 to +60 | ○                             |
| GH0521DE2G                         | SM | <a href="#">PDF</a> | 520                               | 130                                       | 70                      | 270                     | 6.7                    | 0.7                     | 520                           | 1.8                            | 8                    | 22                      | *2                     | 135                                      | -                       | -10 to +60 | -                             |
| GH0523AD2G                         | MM | <a href="#">PDF</a> | 520                               | 300                                       | 100                     | 500                     | 5.2                    | 0.8                     | 520                           | 15                             | 7                    | 23                      | *2                     | -  | 850                     | 0 to +60   | -                             |
| GH0637AA2G                         | MM | <a href="#">PDF</a> | 638                               | 700                                       | 110                     | 810                     | 2.5                    | 1.0                     | 638                           | -                              | 16                   | 35                      | *2                     | 702                                      | -                       | -10 to +40 | -                             |
| ○ GH0631IB2GC                      | SM | <a href="#">PDF</a> | 639                               | 180                                       | 55                      | 215                     | 2.7                    | 1.2                     | 639                           | -                              | 8                    | 15                      | *2                     | 185                                      | -                       | -10 to +60 | -                             |
| GH06610A2KC                        | SM | <a href="#">PDF</a> | 660                               | 10  | 15                      | 24                      | 2.2                    | 1.1                     | 660                           | -                              | 12                   | 33                      | *2                     | 12                                       | -                       | -40 to +90 | ○                             |
| GH06P25A2CC                        | SM | <a href="#">PDF</a> | 660                               | 95  | 40                      | 122                     | 2.4                    | 1.1                     | 660                           | -                              | 10                   | 15.5                    | *2                     | 100                                      | -                       | -10 to +70 | -                             |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions. \*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity \*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# φ3.8mm TO-CAN Package



Contact



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>λ <sub>p</sub><br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                               |                                  |                          |                        |                       |                        | Absolute maximum rating <sup>*1</sup> |             |            | Monitor PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|--------------------------------------|---|-------------------------|-------------------------|------------------------|-------------------------------|----------------------------------|--------------------------|------------------------|-----------------------|------------------------|---------------------------------------|-------------|------------|----------------------------|
|                                    |    |                     |                                      | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | η <sub>d</sub><br>(mW/<br>mA) | (Peak)<br>λ <sub>p</sub><br>(nm) | Emitter<br>width<br>(μm) | FFP                    |                       | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)               | Top<br>(°C) |            |                            |
|                                    |    |                     |                                      |   |                         |                         |                        |                               |                                  |                          | θ <sub>//</sub><br>(°) | θ <sub>⊥</sub><br>(°) |                        |                                       |             |            |                            |
| GH05210H5K                         | SM | <a href="#">PDF</a> | 520                                  | 10  | 25                      | 35                      | 5.8                    | 0.7                           | 520                              | 1.8                      | 7                      | 22                    | *2                     | 15                                    | -           | -10 to +70 | ○                          |
| ● GH05280E5K                       | SM | <a href="#">PDF</a> | 520                                  | 80  | 65                      | 180                     | 6.5                    | 0.7                           | 520                              | 1.85                     | 7                      | 23                    | *2                     | 85                                    | -           | -10 to +60 | ○                          |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions.

\*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity

\*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# φ3.3mm TO-CAN Package



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>λ <sub>p</sub><br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                               |                                  |                          |                        |                       |                        | Absolute<br>maximum rating <sup>*1</sup> |             |            | Monitor<br>PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|--------------------------------------|---|-------------------------|-------------------------|------------------------|-------------------------------|----------------------------------|--------------------------|------------------------|-----------------------|------------------------|--|-------------|------------|-------------------------------|
|                                    |    |                     |                                      | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | η <sub>d</sub><br>(mW/<br>mA) | (Peak)<br>λ <sub>p</sub><br>(nm) | Emitter<br>width<br>(μm) | FFP                    |                       | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)                  | Top<br>(°C) |            |                               |
|                                    |    |                     |                                      |   |                         |                         |                        |                               |                                  |                          | θ <sub>//</sub><br>(°) | θ <sub>⊥</sub><br>(°) |                        |  |             |            |                               |
| GH06510F4AK                        | SM | <a href="#">PDF</a> | 660                                  | 7   | 17                      | 26                      | 2.2                    | 0.9                           | 660                              | -                        | 13                     | 28                    | *2                     | 10                                       | -           | -10 to +70 | ○                             |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions.

\*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity

\*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# t1.8mm Frame



[Contact](#)



○ New product    ● Under development

| Model name<br>[mode] <sup>*4</sup> |    |                     | Wavelength<br>$\lambda_p$<br>(nm) | Characteristics<br>(T <sub>c</sub> =25°C) |                         |                         |                        |                         |                               |                                |                      |                         |                        | Absolute maximum rating <sup>*1</sup> |                         |            | Monitor PD<br>(Built-in:○) |
|------------------------------------|----|---------------------|-----------------------------------|---|-------------------------|-------------------------|------------------------|-------------------------|-------------------------------|--------------------------------|----------------------|-------------------------|------------------------|---------------------------------------|-------------------------|------------|----------------------------|
|                                    |    |                     |                                   | P <sub>o</sub><br>(mW)                    | I <sub>th</sub><br>(mA) | I <sub>op</sub><br>(mA) | V <sub>op</sub><br>(V) | $\eta_d$<br>(mW/<br>mA) | (Peak)<br>$\lambda_p$<br>(nm) | Emitter<br>width<br>( $\mu$ m) | FFP                  |                         | P <sub>o</sub><br>(mW) | I <sub>op</sub><br>(mA)               | T <sub>op</sub><br>(°C) |            |                            |
|                                    |    |                     |                                   |   |                         |                         |                        |                         |                               |                                | $\theta_{//}$<br>(°) | $\theta_{\perp}$<br>(°) |                        |                                       |                         |            |                            |
| GH16P32B8C                         | SM | <a href="#">PDF</a> | 661                               | 90  | 42                      | 120                     | 2.3                    | 1.2                     | 661                           | -                              | 9.3                  | 15                      | *2                     | 100                                   | -                       | -10 to +70 | -                          |
| GH33235A8CN<br>(Two-Wavelength)    | SM | <a href="#">PDF</a> | 661                               | 90  | 50                      | 134                     | 2.4                    | 1.1                     | 661                           | -                              | 8-11.5               | 13.5-19                 | *2                     | 90                                    | -                       | -10 to +85 | -                          |
|                                    |    |                     | 785                               | 150                                       | 53                      | 215                     | 2.4                    | 0.9                     | 785                           |                                | 7-10.5               | 13-18                   |                        | 160                                   |                         |            |                            |
| GH33540D8C5<br>(Two-Wavelength)    | SM | <a href="#">PDF</a> | 661                               | 120                                       | 68                      | 189                     | 2.5                    | 1.0                     | 661                           | -                              | 8.5-11.5             | 14-19                   | *2                     | 125                                   | -                       | -10 to +80 | -                          |
|                                    |    |                     | 785                               | 150                                       | 55                      | 230                     | 2.4                    | 0.9                     | 785                           |                                | 7-10.5               | 13-18                   |                        | 200                                   |                         |            |                            |

\*1 The absolute maximum rating is a limit that must not be exceeded under any operating or test conditions.

\*2 Overall width angle at 1/2 of peak intensity

\*3 Overall width angle at 1/e<sup>2</sup> of peak intensity

\*4 MM: Multimode, SM: Single mode

※ Please contact us for combinations of packages and characteristics other than the above.

# GH0382AA2G Multi-mode UV Laser Diode

[Contact](#)

[To the Wavelength](#)

[To the Package](#)

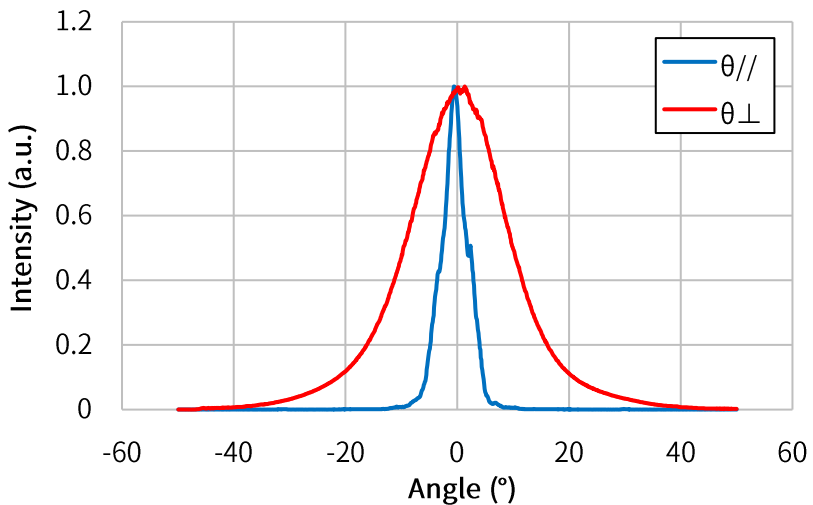
## Characteristics

(Tc=25°C, CW)

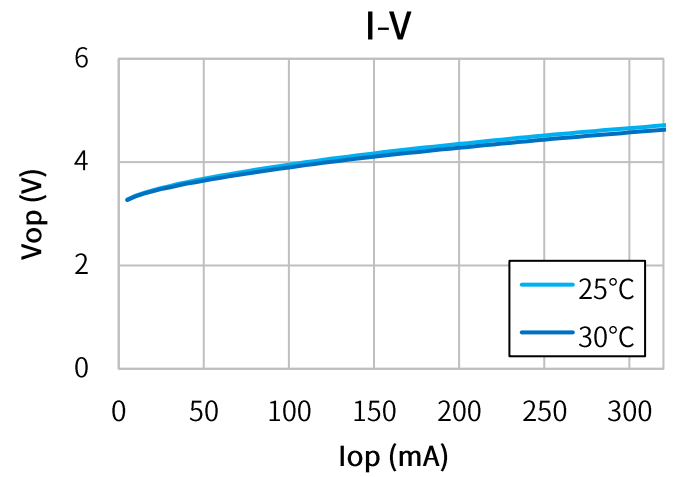
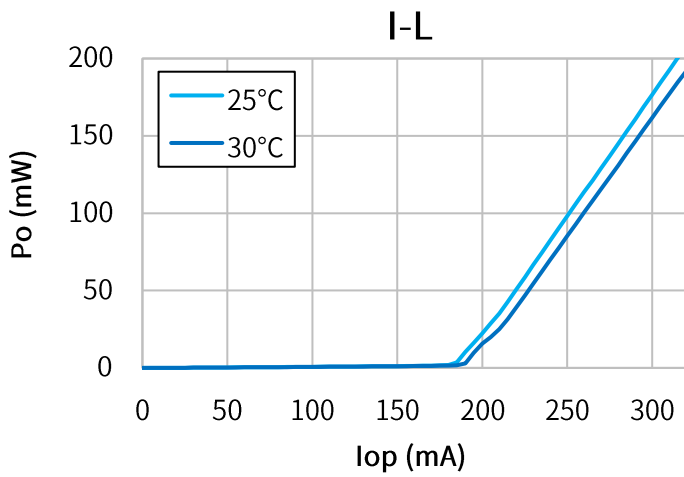
| Item                           | Conditions | Characteristic value (TYP.) |
|--------------------------------|------------|-----------------------------|
| Wavelength (Peak)              | Po=200mW   | 380nm                       |
| Output [Max]                   | —          | 200mW [210mW]               |
| Threshold current              | —          | 200mA                       |
| Operating current              | Po=200mW   | 325mA                       |
| Operating voltage              | Po=200mW   | 4.4V                        |
| Far Field ( 1/e <sup>2</sup> ) | Po=200mW   | θ// 15°, θ⊥ 36°             |

|                      |                             |
|----------------------|-----------------------------|
| Terminal connections | <a href="#">No.9</a>        |
| Package type         | <a href="#">TO-CAN φ5.6</a> |

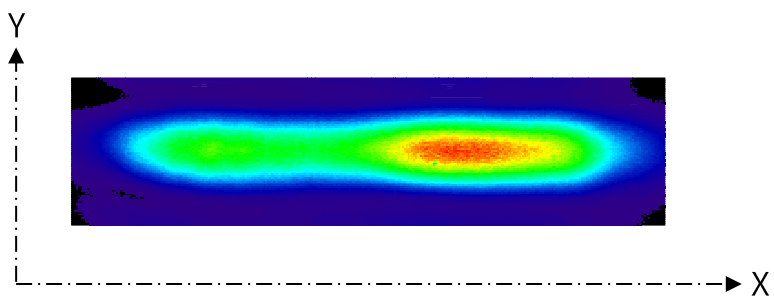
## Far Field Pattern



## CW I-L, I-V Temperature

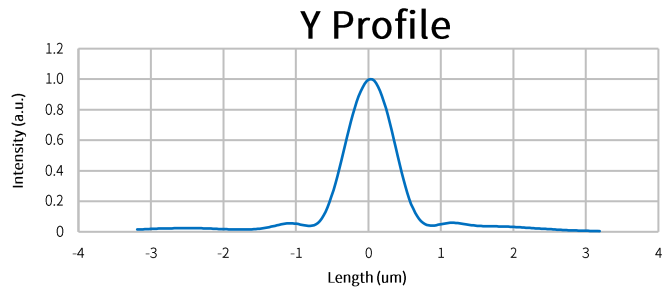
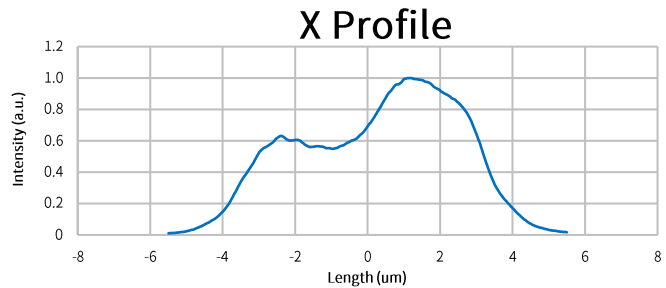


## Near Field Pattern



Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 6.2       | 6.7      | 7.9                   |
| Y | 0.7       | 0.9      | 1.2                   |



# GH0393AA2G Multi-mode UV Laser Diode

✉ [Contact](#)

↶ [To the Wavelength](#)

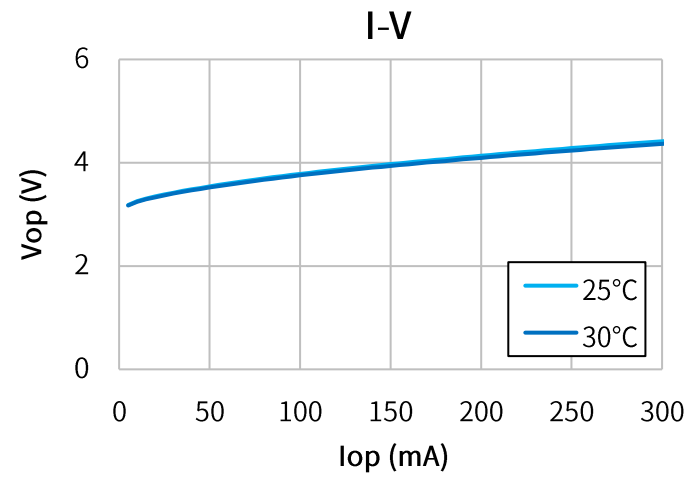
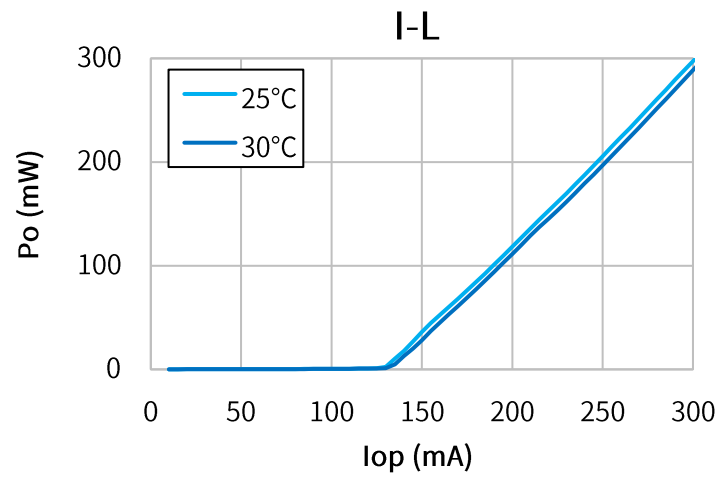
↶ [To the Package](#)

## ■ Characteristics

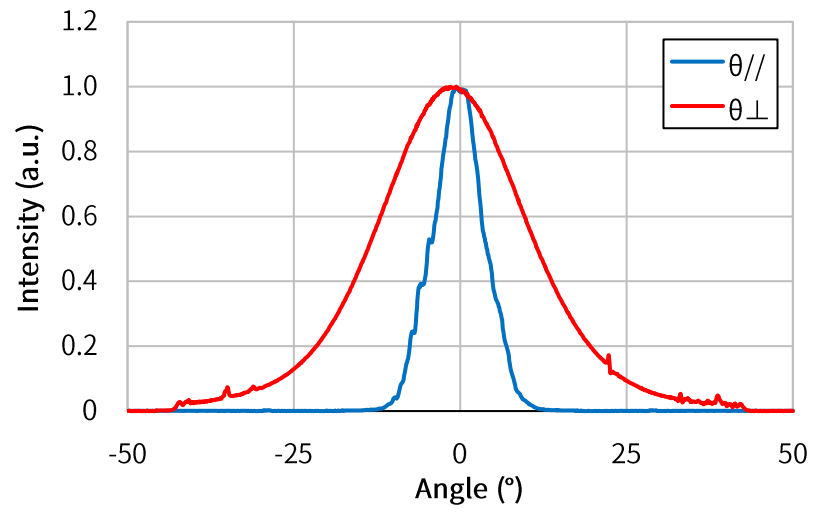
(Tc=25°C, CW)

| Item                          | Conditions                  | Characteristic value (TYP.) |
|-------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)             | Po=300mW                    | 395nm                       |
| Output [Max]                  | —                           | 300mW<br>[350mW]            |
| Threshold current             | —                           | 150mA                       |
| Operating current             | Po=300mW                    | 310mA                       |
| Operating voltage             | Po=300mW                    | 4.4V                        |
| Far Field (1/e <sup>2</sup> ) | Po=300mW                    | θ// 13°, θ⊥ 44°             |
| Terminal connections          | <a href="#">No.9</a>        |                             |
| Package type                  | <a href="#">TO-CAN φ5.6</a> |                             |

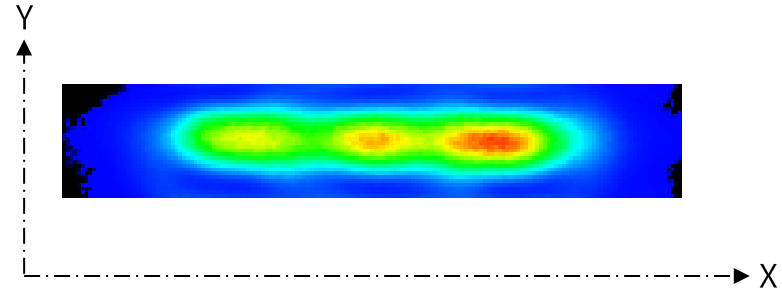
## ■ CW I-L, I-V Temperature



## ■ Far Field Pattern



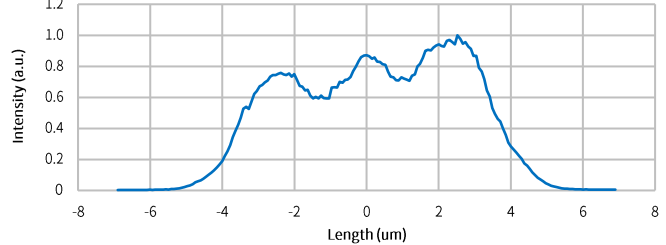
## ■ Near Field Pattern



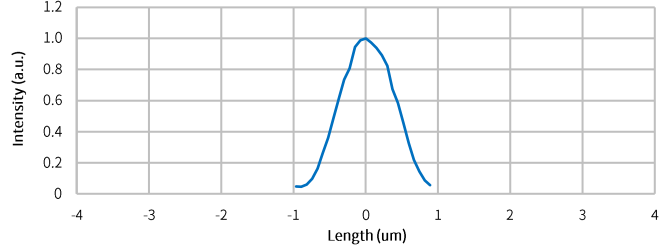
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 7.0       | 7.5      | 8.7                   |
| Y | 0.9       | 1.1      | 1.5                   |

## X Profile



## Y Profile



# GH0401FA2G Single-mode UV Laser Diode

✉ [Contact](#)

↶ [To the Wavelength](#)

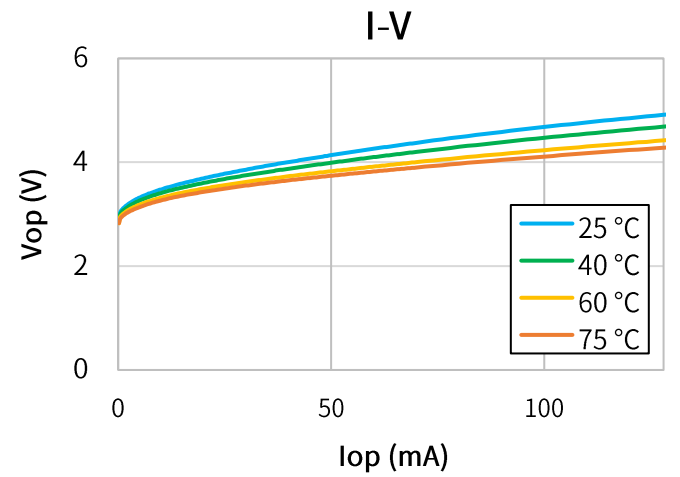
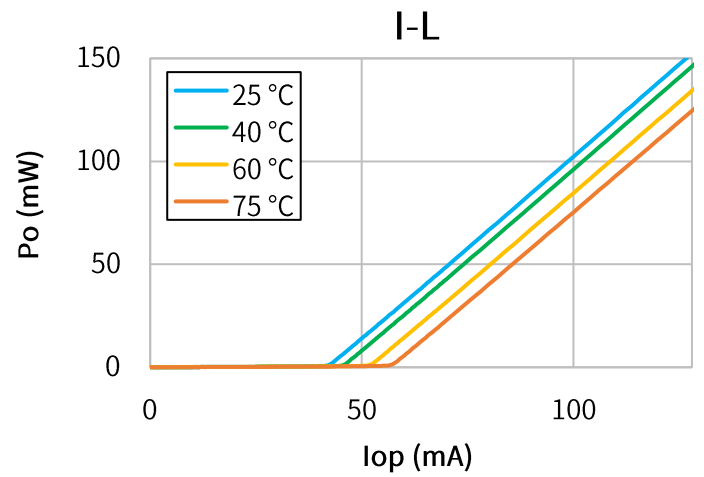
↶ [To the Package](#)

## ■ Characteristics

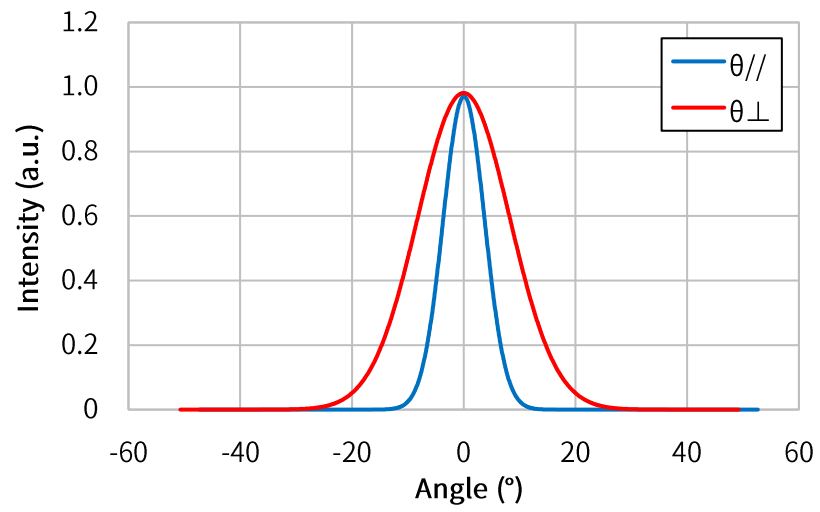
(Tc=25°C, CW)

| Item                 | Conditions                                   | Characteristic value (TYP.)                    |
|----------------------|--|--|
| Wavelength (Peak)    | Po=150mW                                     | 405nm  |
| Output [Max]         | —  | 150mW<br>[155mW]                               |
| Threshold current    | —  | 40mA   |
| Operating current    | Po=150mW                                     | 130mA  |
| Operating voltage    | Po=150mW                                     | 5.0V   |
| Far Field (FWHM)     | Po=150mW                                     | $\theta_{//} 9^\circ, \theta_{\perp} 19^\circ$ |
| Terminal connections | <a href="#">No.8</a>                         |  |
| Package type         | <a href="#">TO-CAN <math>\phi 5.6</math></a> |  |

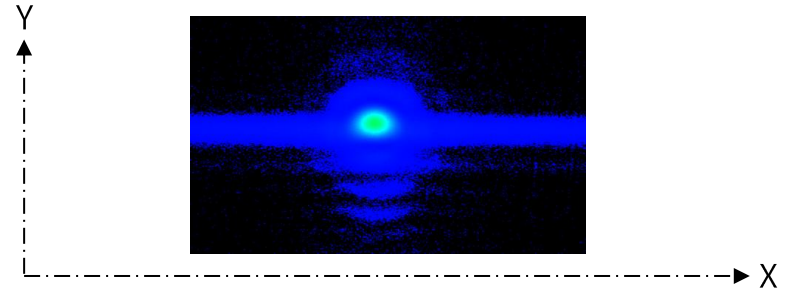
## ■ CW I-L, I-V Temperature



## ■ Far Field Pattern



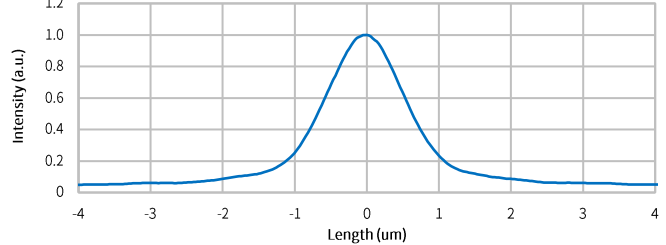
## ■ Near Field Pattern



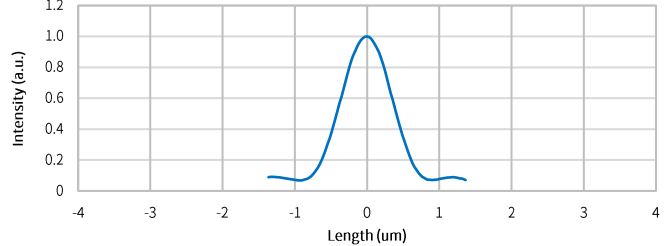
Emitter size

|   | FWHM ( $\mu\text{m}$ ) | 1/e ( $\mu\text{m}$ ) | 1/e <sup>2</sup> ( $\mu\text{m}$ ) |
|---|------------------------|-----------------------|------------------------------------|
| X | 1.3                    | 1.6                   | 2.7                                |
| Y | 0.8                    | 1.0                   | 1.4                                |

## X Profile



## Y Profile



# GH04V01A2GC Multi-mode UV Laser Diode

Contact

To the Wavelength

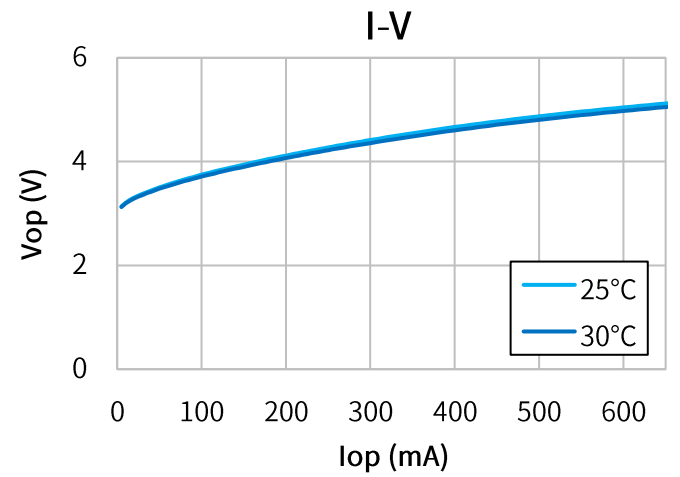
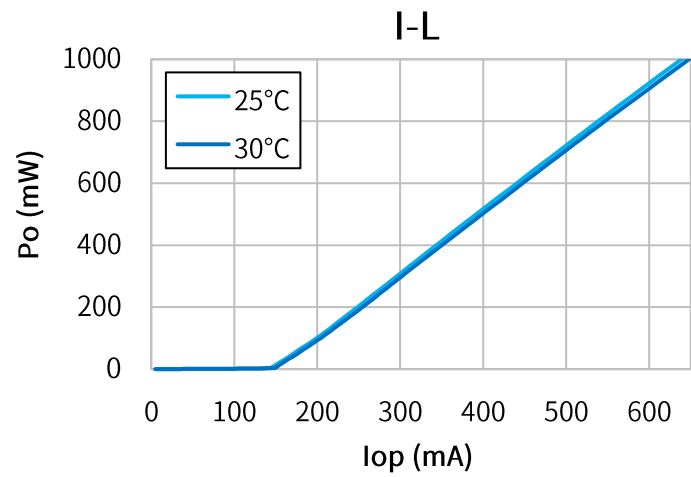
To the Package

## Characteristics

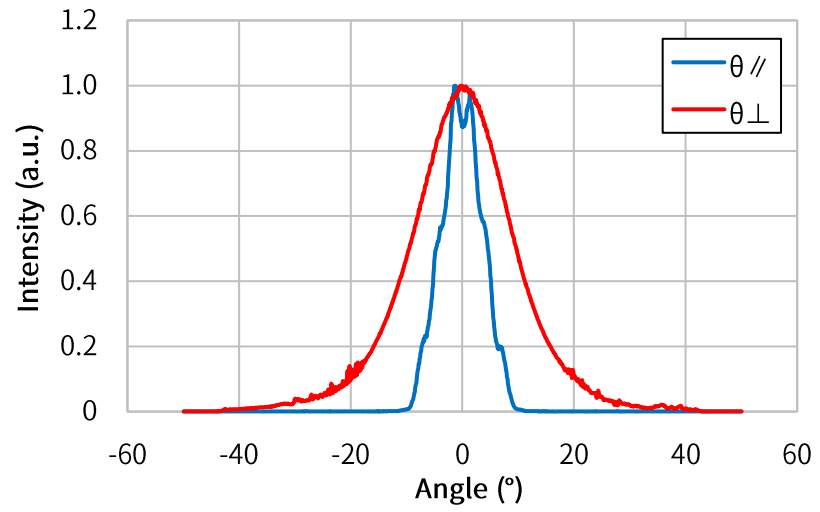
(Tc=25°C, CW)

| Item                           | Conditions                                  | Characteristic value (TYP.)             |
|--------------------------------|---|---|
| Wavelength (Peak)              | Po=1000mW                                   | 405nm                                   |
| Output [Max]                   | —   | 1000mW<br>[1100mW]                      |
| Threshold current              | —   | 150mA                                   |
| Operating current              | Po=1000mW                                   | 650mA                                   |
| Operating voltage              | Po=1000mW                                   | 5.0V                                    |
| Far Field ( 1/e <sup>2</sup> ) | Po=1000mW                                   | $\theta_{//}$ 16°, $\theta_{\perp}$ 40° |
| Terminal connections           | <a href="#">No.9</a>                        |   |
| Package type                   | <a href="#">TO-CAN <math>\phi</math>5.6</a> |   |

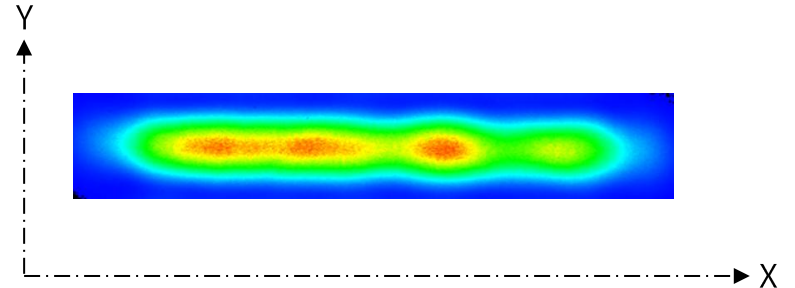
## CW I-L, I-V Temperature



## Far Field Pattern



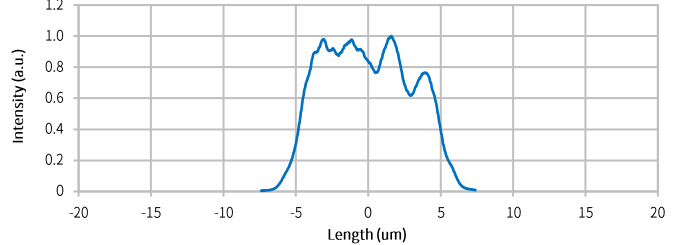
## Near Field Pattern



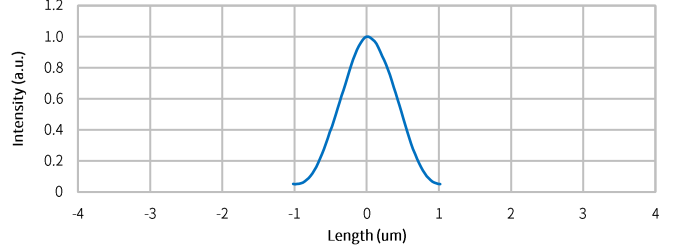
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 9.5             | 9.9            | 11.5                        |
| Y | 0.9             | 1.1            | 1.5                         |

## X Profile



## Y Profile



# GH04V03Z9G Multi-mode UV Laser Diode

[Contact](#)

[To the Wavelength](#)

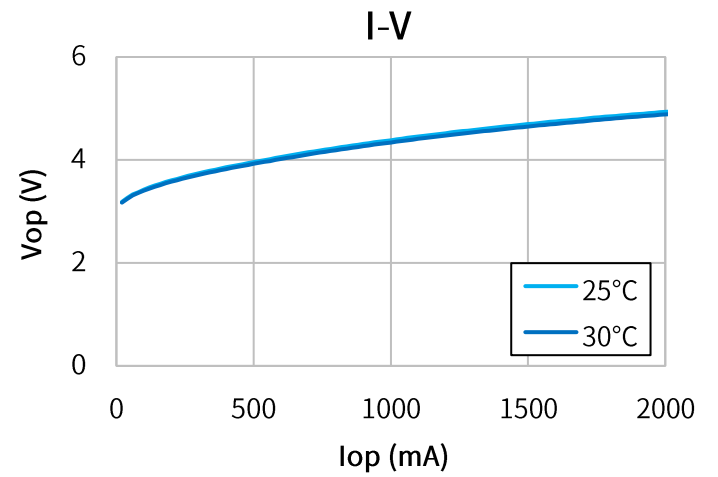
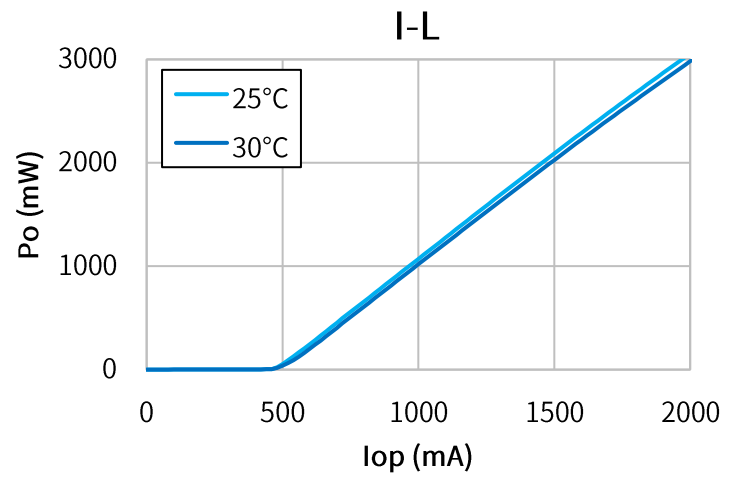
[To the Package](#)

## Characteristics

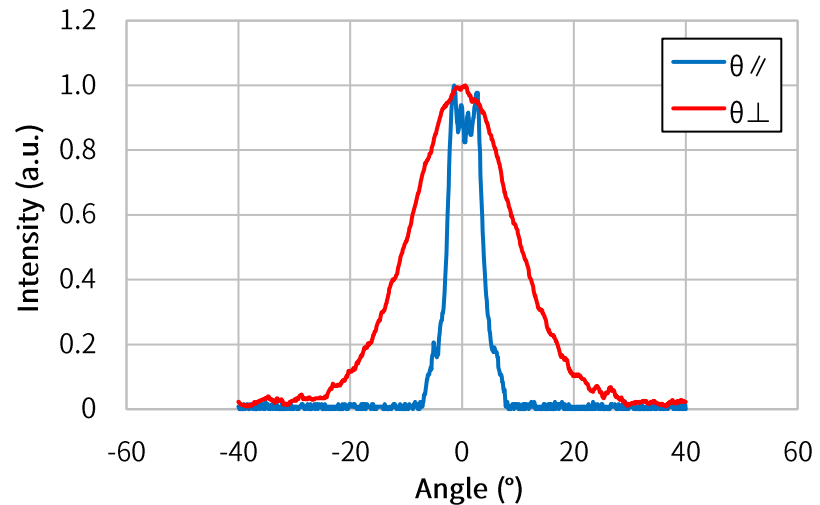
(Tc=25°C, CW)

| Item                          | Conditions                  | Characteristic value (TYP.) |
|-------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)             | Po=3000mW                   | 405nm                       |
| Output                        | —                           | 3000mW                      |
| Threshold current             | —                           | 450mA                       |
| Operating current             | Po=3000mW                   | 1800mA                      |
| Operating voltage             | Po=3000mW                   | 4.0V                        |
| Far Field (1/e <sup>2</sup> ) | Po=3000mW                   | θ// 8°, θ⊥ 40°              |
| Terminal connections          | <a href="#">No.13</a>       |                             |
| Package type                  | <a href="#">TO-CAN φ9.0</a> |                             |

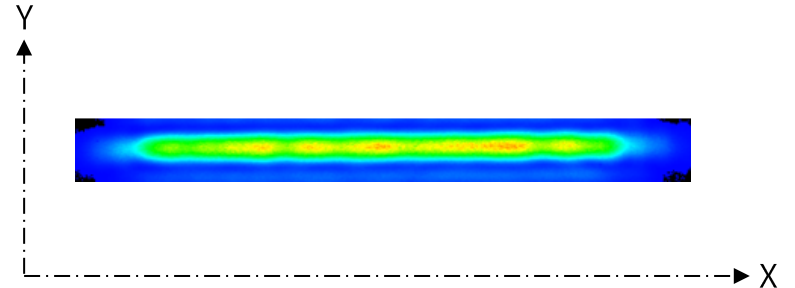
## CW I-L, I-V Temperature



## Far Field Pattern



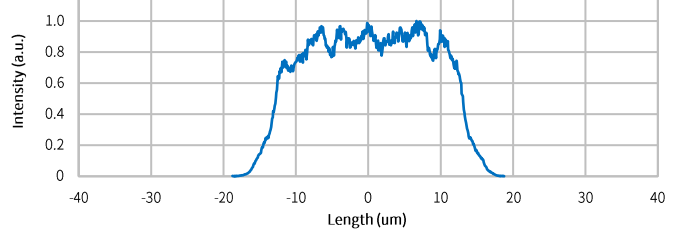
## Near Field Pattern



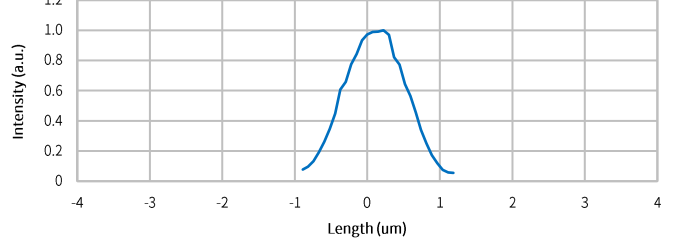
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 25.8      | 26.7     | 30.5                  |
| Y | 1.1       | 1.2      | 1.7                   |

## X Profile



## Y Profile



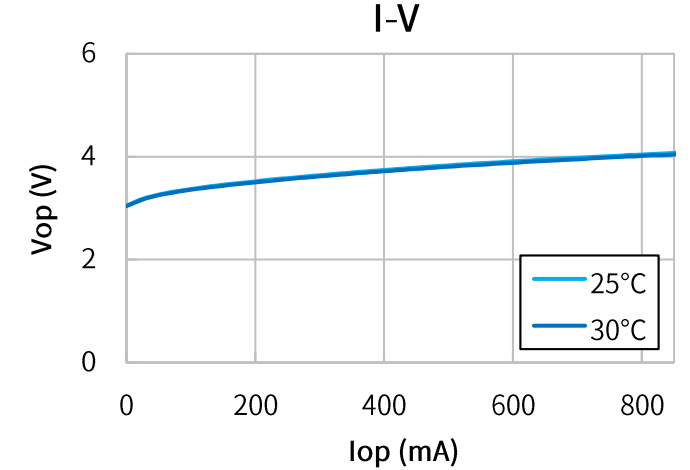
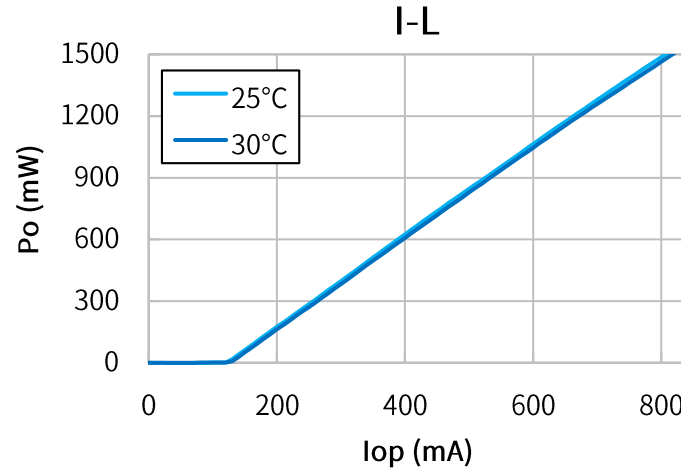
# GH04I01A2G Multi-mode Blue Laser Diode

## Characteristics

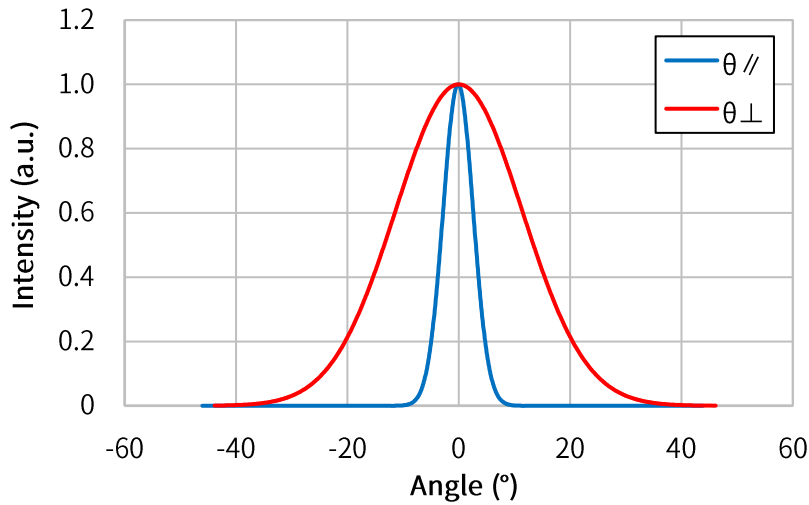
(Tc=25°C, CW)

| Item                           | Conditions                  | Characteristic value (TYP.) |
|--------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)              | Po=1500mW                   | 425nm                       |
| Output [Max]                   | —                           | 1500mW [1600mW]             |
| Threshold current              | —                           | 120mA                       |
| Operating current              | Po=1500mW                   | 850mA                       |
| Operating voltage              | Po=1500mW                   | 4.2V                        |
| Far Field ( 1/e <sup>2</sup> ) | Po=1500mW                   | θ// 8°, θ⊥ 47°              |
| Terminal connections           | <a href="#">No.9</a>        |                             |
| Package type                   | <a href="#">TO-CAN φ5.6</a> |                             |

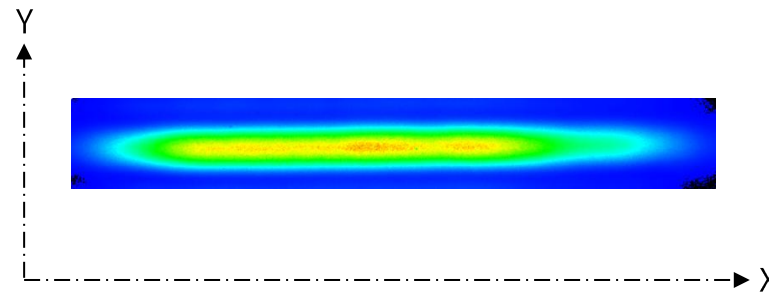
## CW I-L, I-V Temperature



## Far Field Pattern



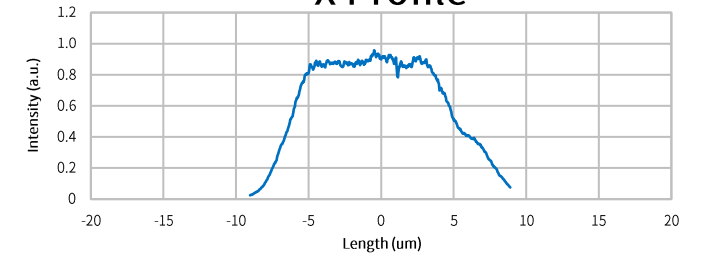
## Near Field Pattern



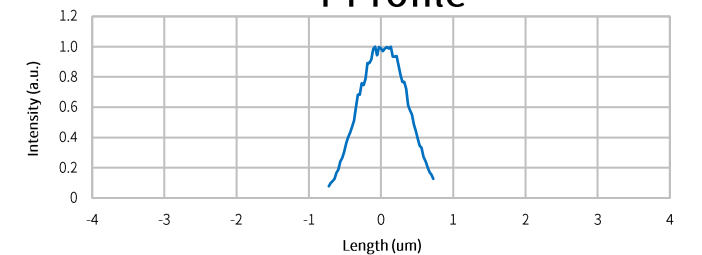
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 11.7      | 13.7     | 16.3                  |
| Y | 0.8       | 1.0      | 1.4                   |

## X Profile



## Y Profile

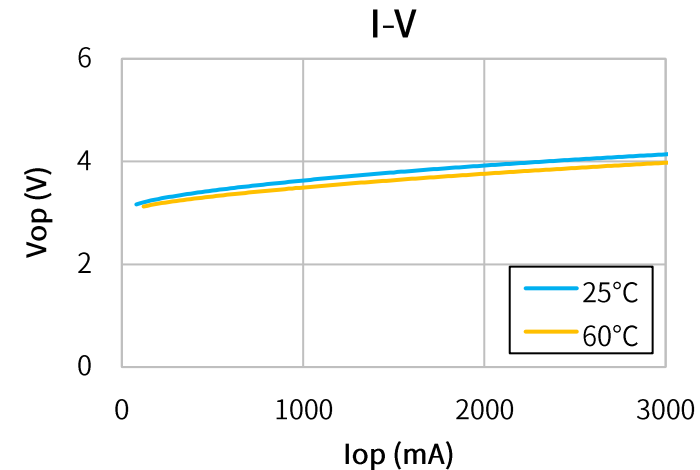
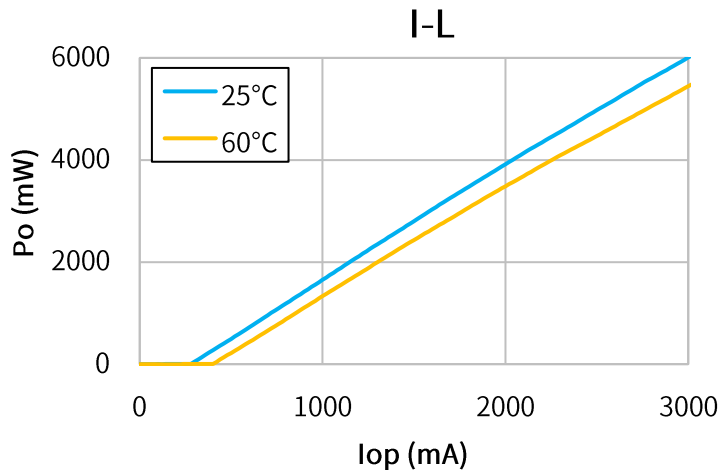


## Characteristics

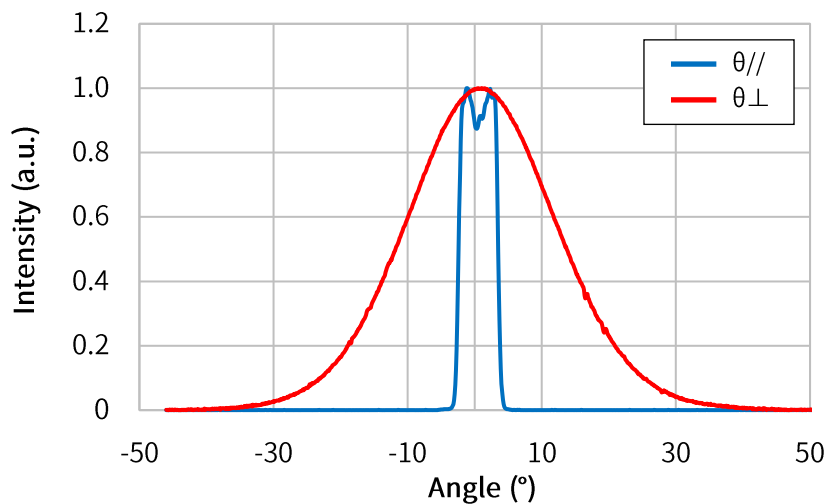
(Tc=25°C, CW)

| Item                           | Conditions                  | Characteristic value (TYP.) |
|--------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)              | Po=6000mW                   | 435nm                       |
| Output                         | —                           | 6000mW                      |
| Threshold current              | —                           | 300mA                       |
| Operating current              | Po=6000mW                   | 3000mA                      |
| Operating voltage              | Po=6000mW                   | 4.2V                        |
| Far Field ( 1/e <sup>2</sup> ) | Po=6000mW                   | θ// 7°, θ⊥ 45°              |
| Terminal connections           | <a href="#">No.13</a>       |                             |
| Package type                   | <a href="#">TO-CAN φ9.0</a> |                             |

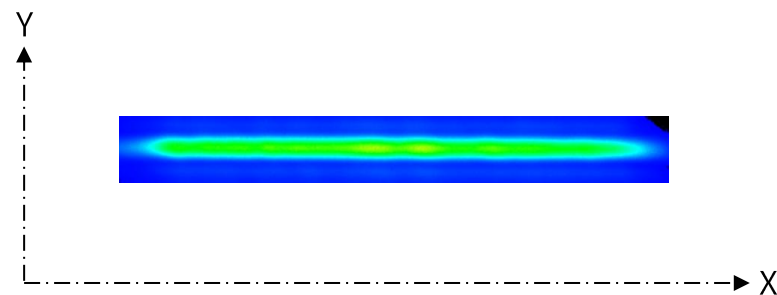
## CW I-L, I-V Temperature



## Far Field Pattern



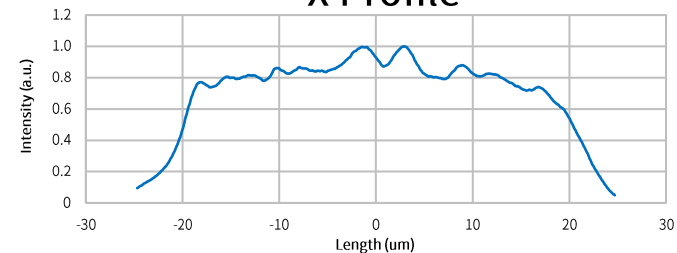
## Near Field Pattern



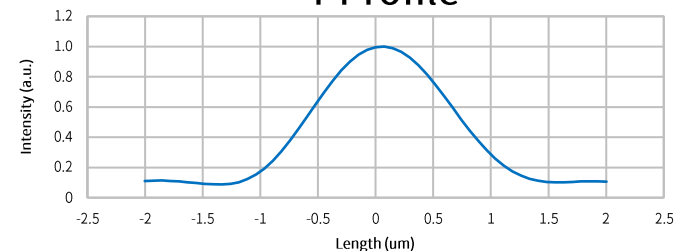
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 40.2      | 42.0     | 47.1                  |
| Y | 1.4       | 1.6      | 1.7                   |

## X Profile



## Y Profile



# GH04C07W9G Multi-mode Blue Laser Diode

[Contact](#)

[To the Wavelength](#)

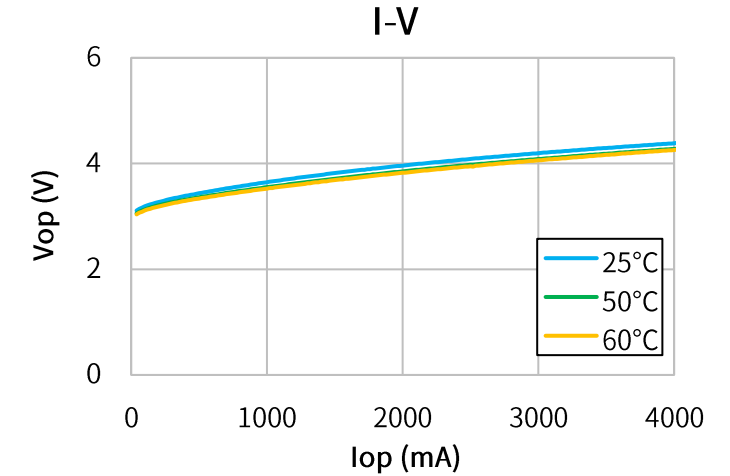
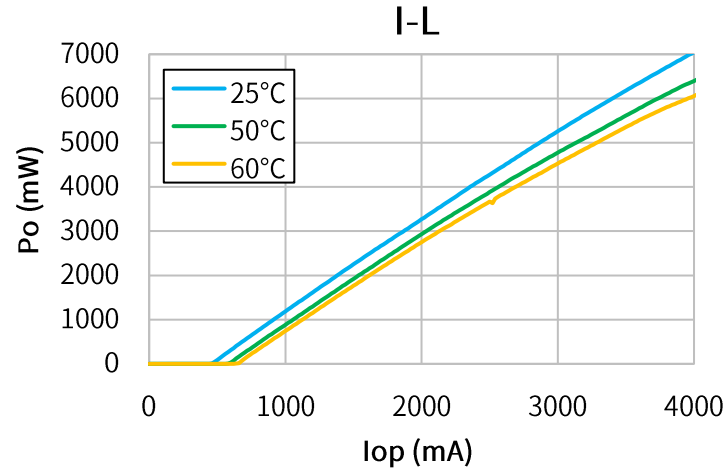
[To the Package](#)

## Characteristics

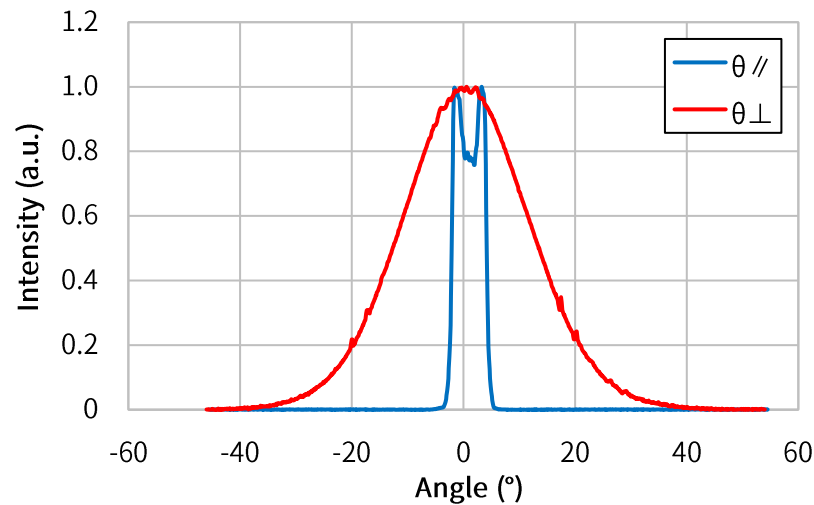
(Tc=25°C, CW)

| Item                          | Conditions                  | Characteristic value (TYP.) |
|-------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)             | Po=7000mW                   | 435nm                       |
| Output                        | —                           | 7000 mW                     |
| Threshold current             | —                           | 360mA                       |
| Operating current             | Po=7000mW                   | 4000mA                      |
| Operating voltage             | Po=7000mW                   | 4.3V                        |
| Far Field (1/e <sup>2</sup> ) | Po=7000mW                   | θ// 8°, θ⊥ 47°              |
| Terminal connections          | <a href="#">No.13</a>       |                             |
| Package type                  | <a href="#">TO-CAN φ9.0</a> |                             |

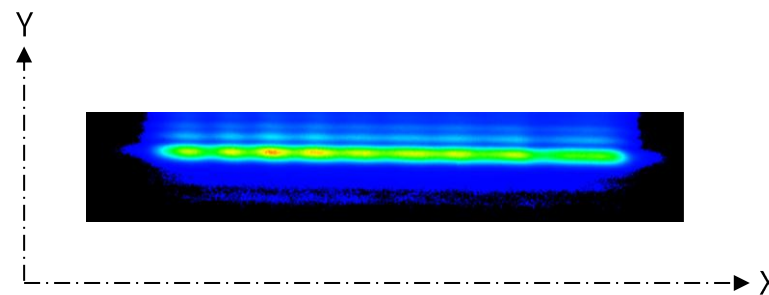
## CW I-L, I-V Temperature



## Far Field Pattern



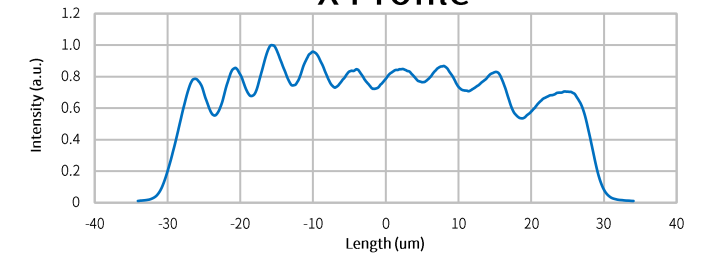
## Near Field Pattern



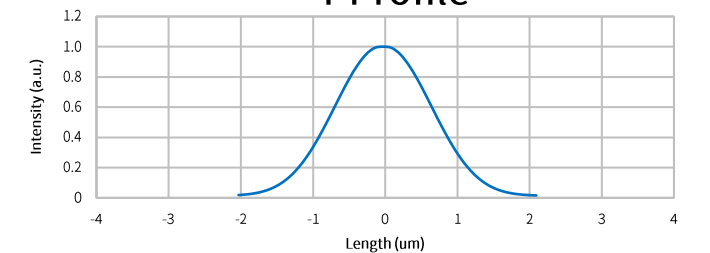
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 56.0      | 57.3     | 60.0                  |
| Y | 1.42      | 1.70     | 2.59                  |

## X Profile



## Y Profile



# GH04550A2G Single-mode Blue Laser Diode

Contact

To the Wavelength

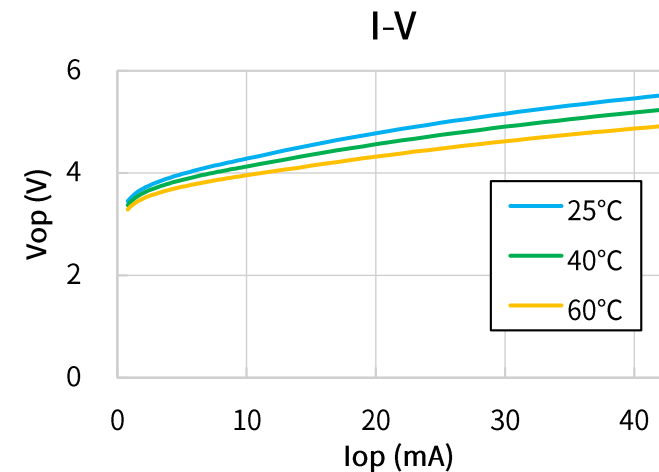
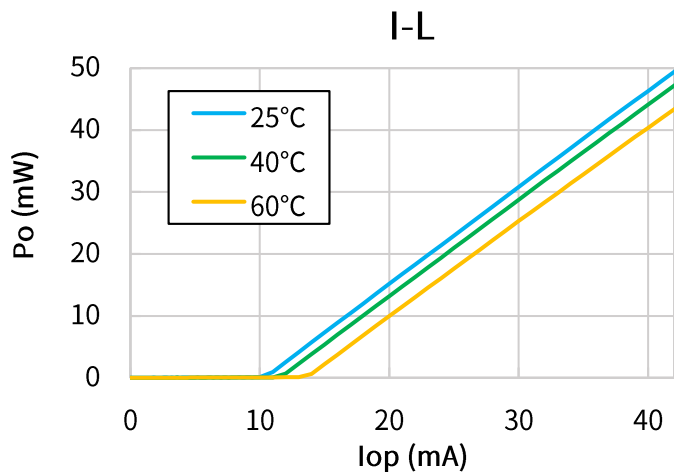
To the Package

## Characteristics

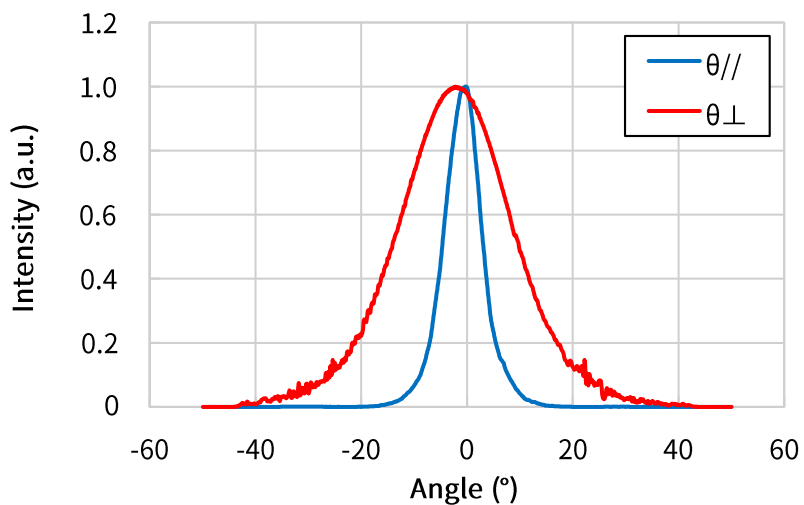
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=50mW                                     | 450nm                                  |
| Output [Max]         | —   | 50mW                                   |
| Threshold current    | —   | 12mA                                   |
| Operating current    | Po=50mW                                     | 42mA                                   |
| Operating voltage    | Po=50mW                                     | 5.5V                                   |
| Far Field (FWHM)     | Po=50mW                                     | $\theta_{//}$ 8°, $\theta_{\perp}$ 24° |
| Terminal connections | <a href="#">No.8</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

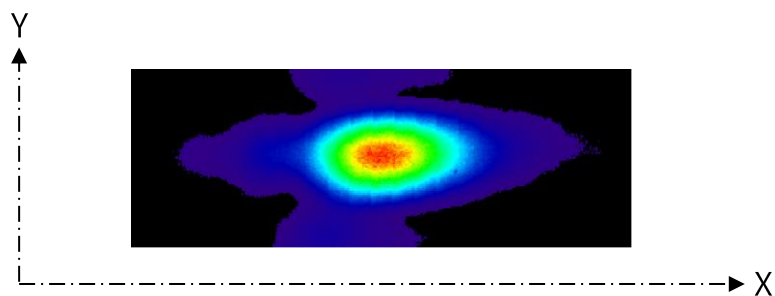
## CW I-L, I-V Temperature



## Far Field Pattern



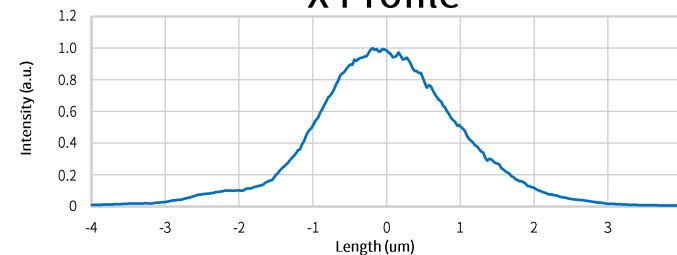
## Near Field Pattern



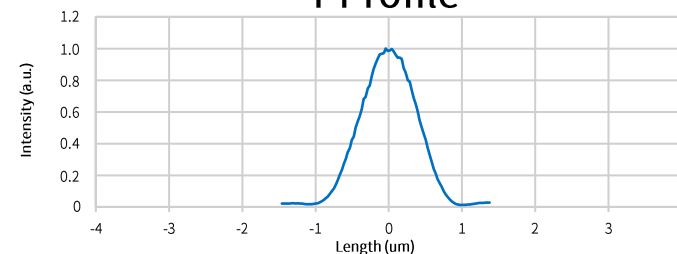
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 2.03            | 2.41           | 3.59                        |
| Y | 0.9             | 1.07           | 1.44                        |

## X Profile



## Y Profile



# GH04580A2G Single-mode Blue Laser Diode

Contact

To the Wavelength

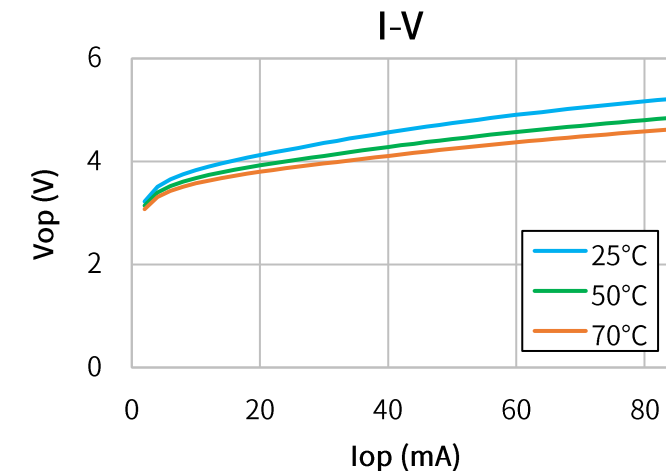
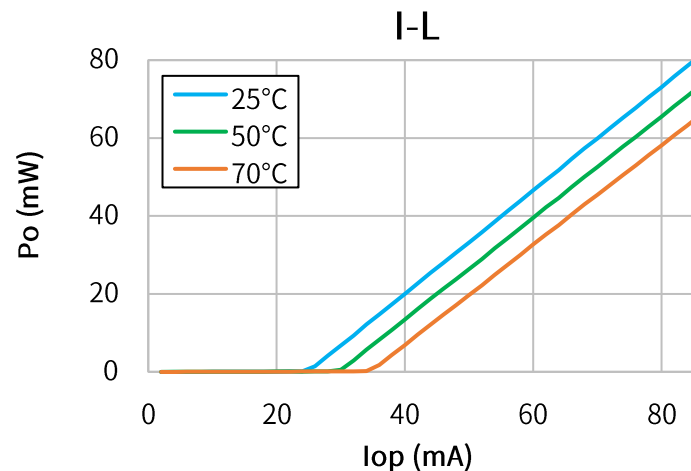
To the Package

## Characteristics

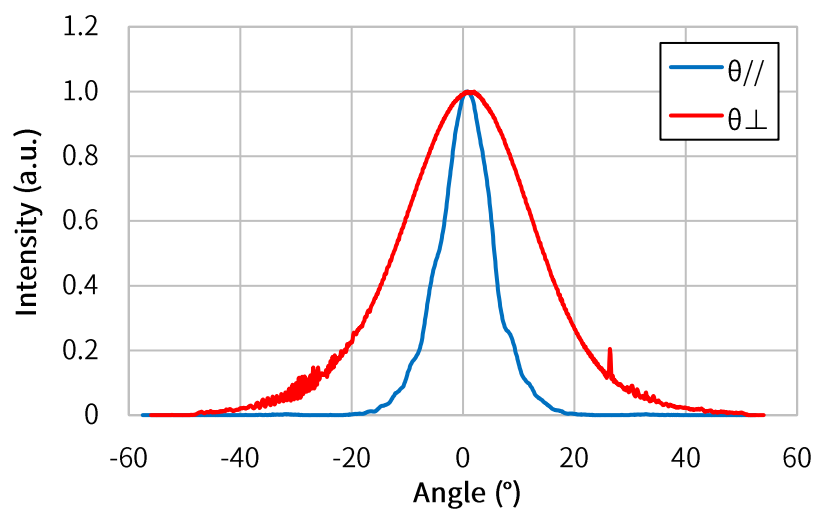
(T<sub>c</sub>=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)             |
|----------------------|---|---|
| Wavelength (Peak)    | Po=80mW                                     | 450nm                                   |
| Output [Max]         | —   | 80mW[85mW]                              |
| Threshold current    | —   | 22mA                                    |
| Operating current    | Po=80mW                                     | 84mA                                    |
| Operating voltage    | Po=80mW                                     | 5.1V                                    |
| Far Field (FWHM)     | Po=80mW                                     | $\theta_{//}$ 10°, $\theta_{\perp}$ 24° |
| Terminal connections | <a href="#">No.8</a>                        |   |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |   |

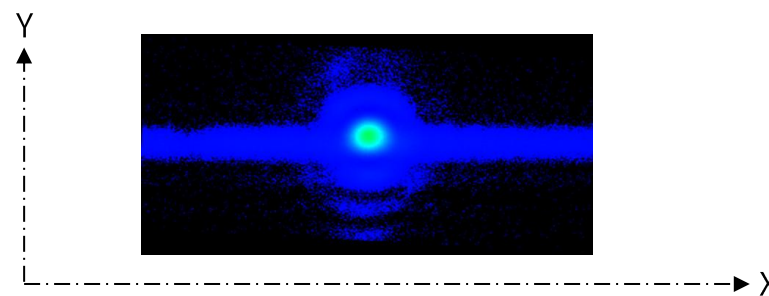
## CW I-L, I-V Temperature



## Far Field Pattern



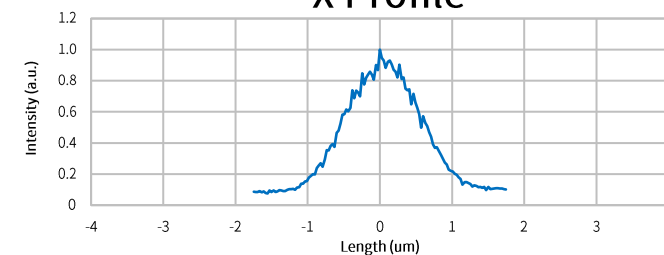
## Near Field Pattern



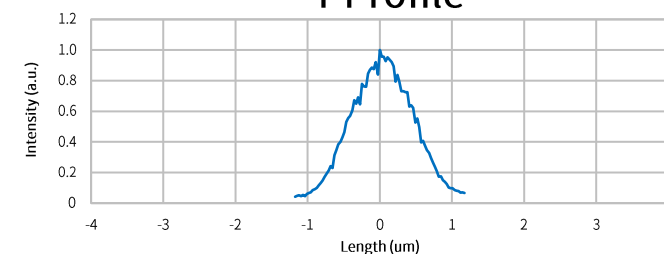
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.2             | 1.4            | 2.4                         |
| Y | 0.8             | 1.0            | 1.4                         |

## X Profile



## Y Profile



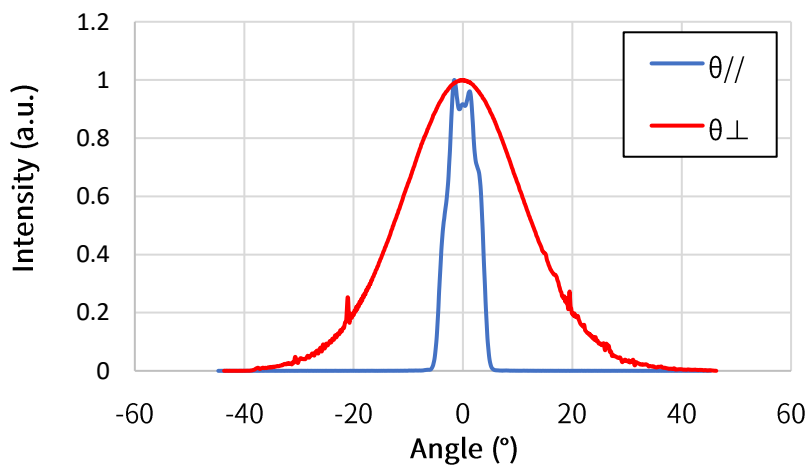
## Characteristics

(Tc=25°C, CW)

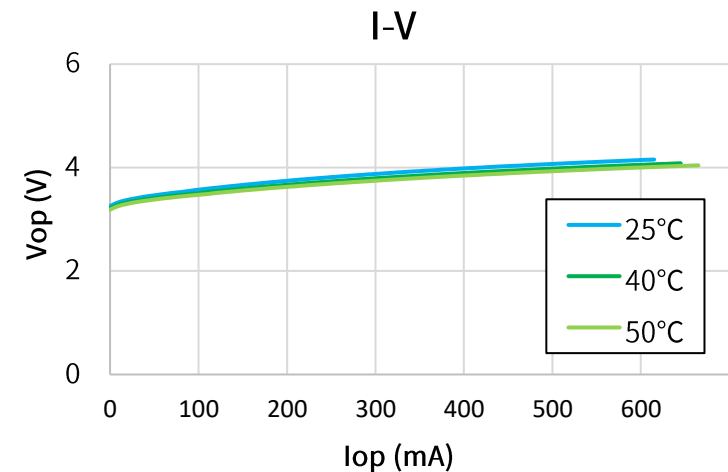
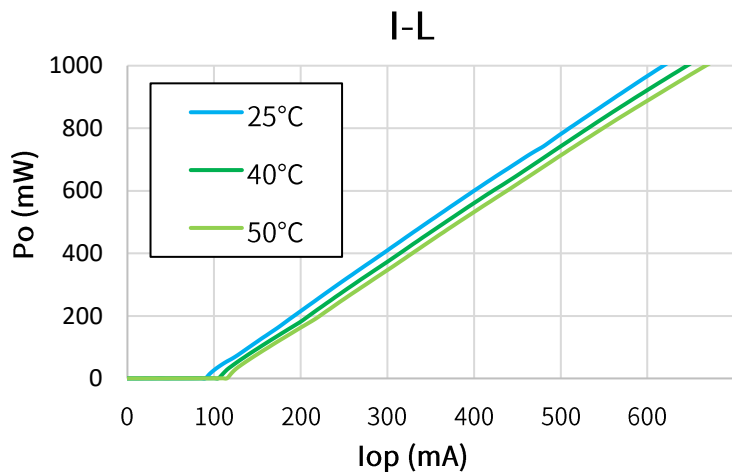
| Item                          | Conditions                    | Characteristic value (TYP.)    |
|-------------------------------|-------------------------------|--------------------------------|
| Wavelength (Peak)             | Po=1000mW                     | 450nm                          |
| Output [Max]                  | —<br>TC=-10~+25°C<br>TC=+50°C | 1000mW<br>[1100mW]<br>[1000mW] |
| Threshold current             | —                             | 100mA                          |
| Operating current             | Po=1000mW                     | 680mA                          |
| Operating voltage             | Po=1000mW                     | 4.3V                           |
| Far Field (1/e <sup>2</sup> ) | Po=1000mW                     | θ// 10°, θ⊥ 45°                |

|                      |                             |
|----------------------|-----------------------------|
| Terminal connections | <a href="#">No.9</a>        |
| Package type         | <a href="#">TO-CAN φ5.6</a> |

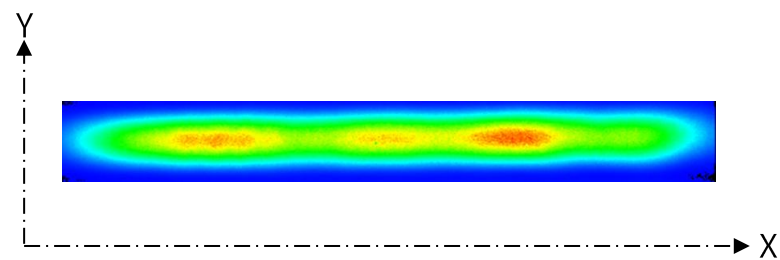
## Far Field Pattern



## CW I-L, I-V Temperature



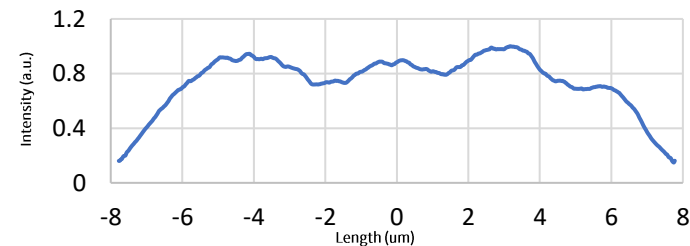
## Near Field Pattern



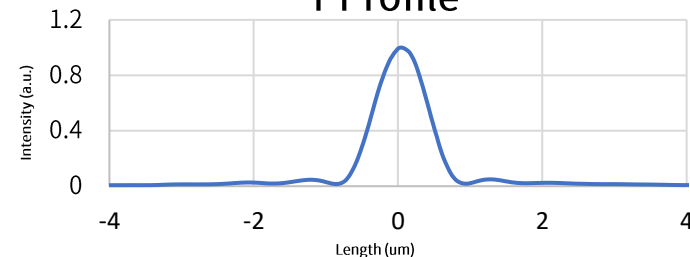
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 13.5      | 14.0     | 15.6                  |
| Y | 0.8       | 1.0      | 1.3                   |

## X Profile



## Y Profile



# GH04C01B2G Multi-mode Blue Laser Diode

Contact

To the Wavelength

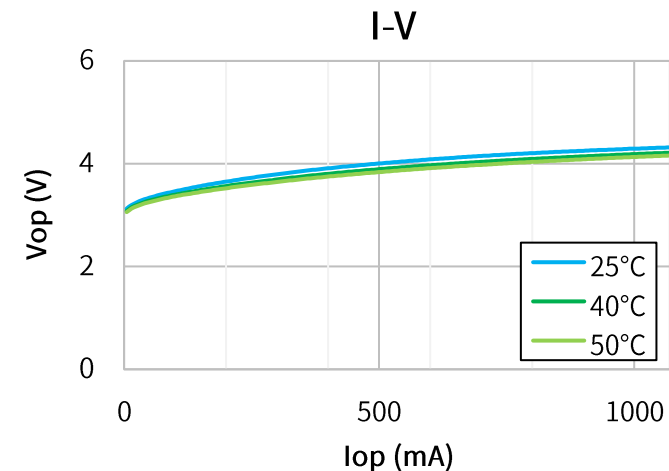
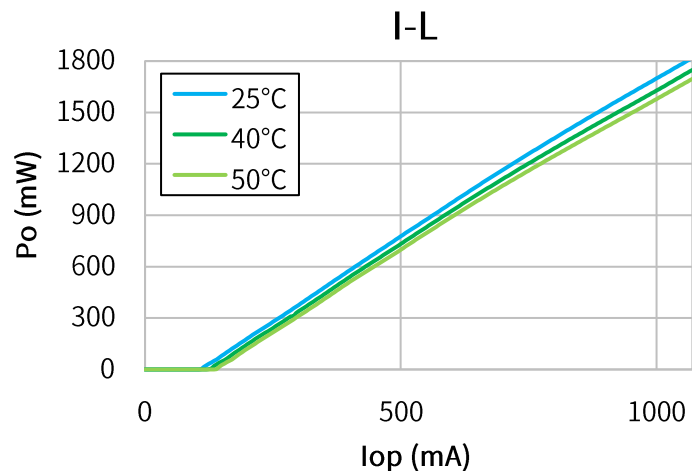
To the Package

## Characteristics

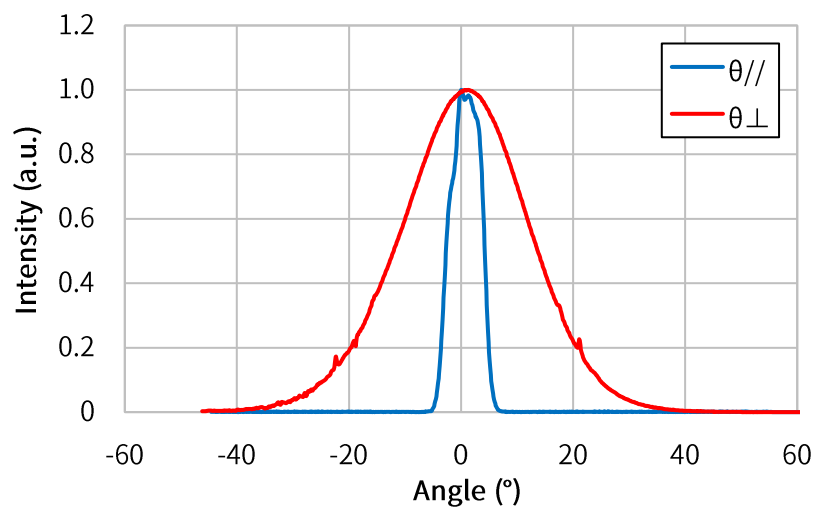
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=1800mW                                   | 450nm                                  |
| Output [Max]         | —   | 1800mW<br>[2000mW]                     |
| Threshold current    | —   | 110mA                                  |
| Operating current    | Po=1800mW                                   | 1100mA                                 |
| Operating voltage    | Po=1800mW                                   | 4.1V                                   |
| Far Field (FWHM)     | Po=1800mW                                   | $\theta_{//}$ 7°, $\theta_{\perp}$ 26° |
| Terminal connections | <a href="#">No.9</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

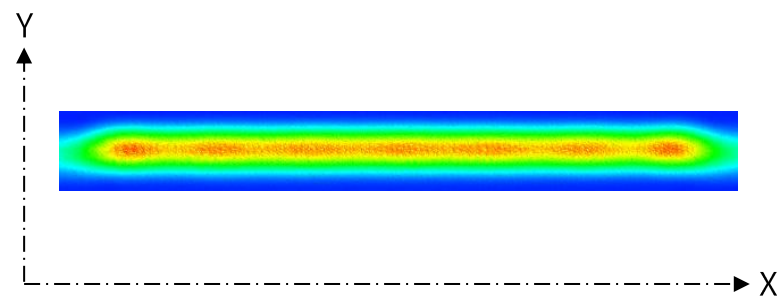
## CW I-L, I-V Temperature



## Far Field Pattern



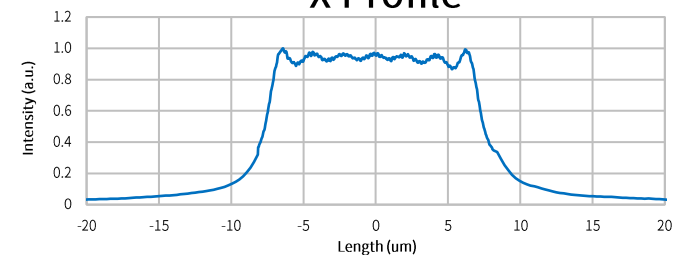
## Near Field Pattern



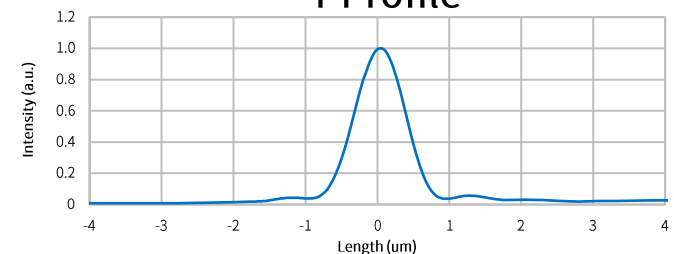
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 15.1            | 16.1           | 20.2                        |
| Y | 0.8             | 1.0            | 1.3                         |

## X Profile



## Y Profile



# GH04C03Z9G Multi-mode Blue Laser Diode

Contact

To the Wavelength

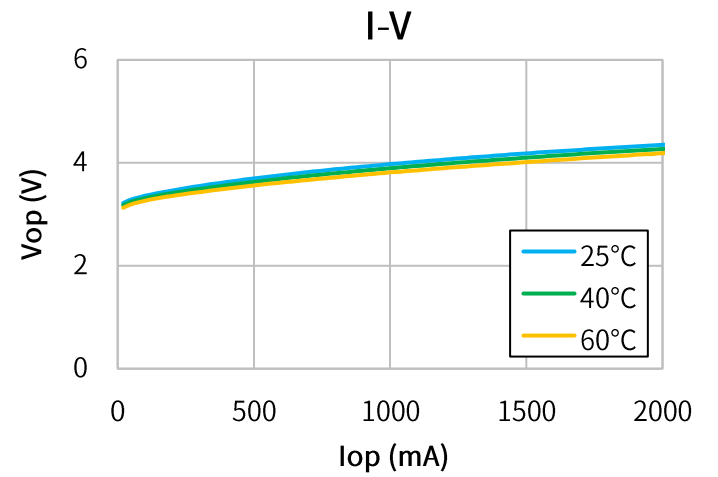
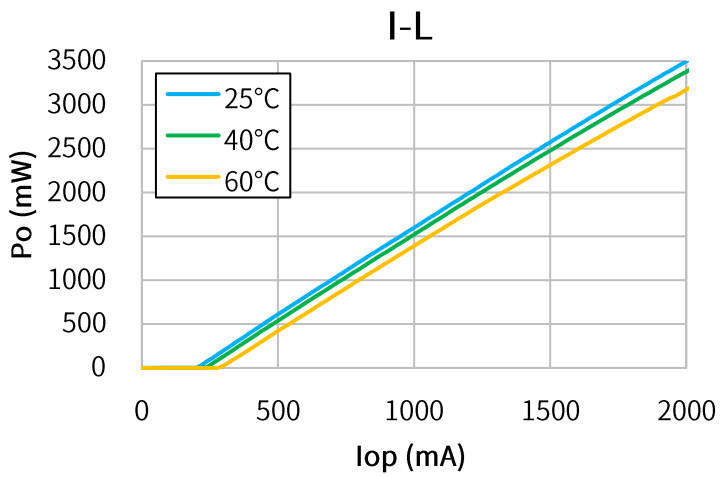
To the Package

## Characteristics

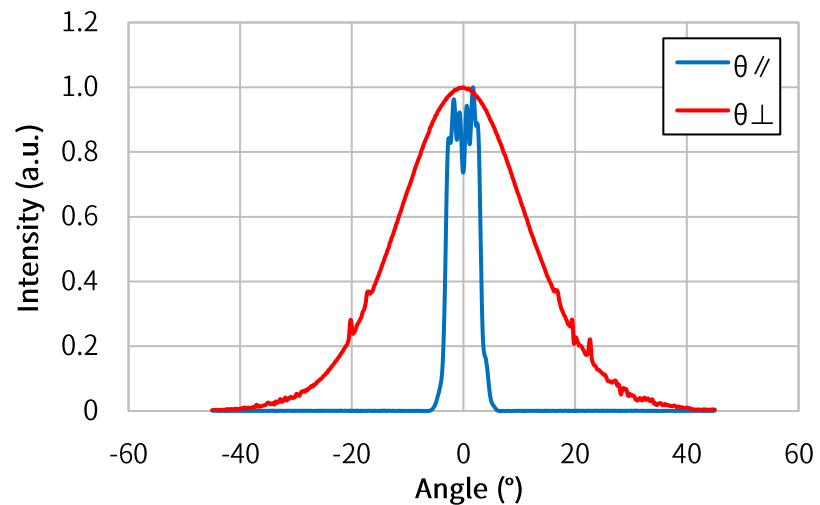
(Tc=25°C, CW)

| Item                          | Conditions                  | Characteristic value (TYP.) |
|-------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)             | Po=3500mW                   | 450nm                       |
| Output                        | —                           | 3500mW                      |
| Threshold current             | —                           | 260mA                       |
| Operating current             | Po=3500mW                   | 2100mA                      |
| Operating voltage             | Po=3500mW                   | 4.4V                        |
| Far Field (1/e <sup>2</sup> ) | Po=3500mW                   | θ// 9°, θ⊥ 47°              |
| Terminal connections          | <a href="#">No.13</a>       |                             |
| Package type                  | <a href="#">TO-CAN φ9.0</a> |                             |

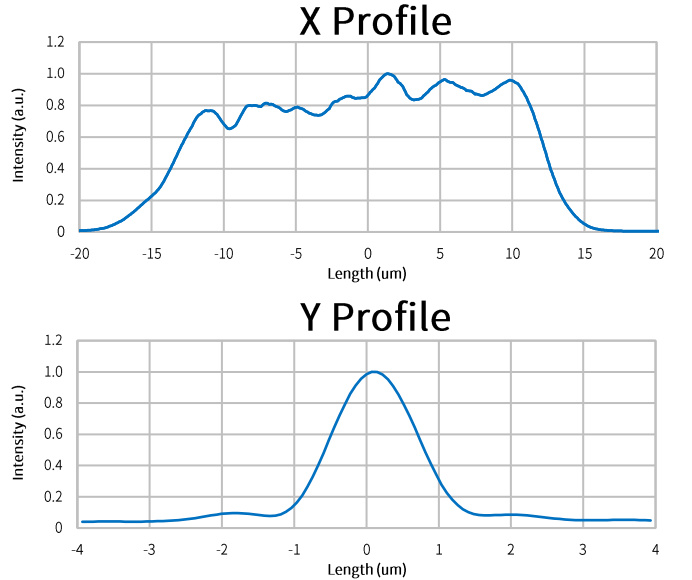
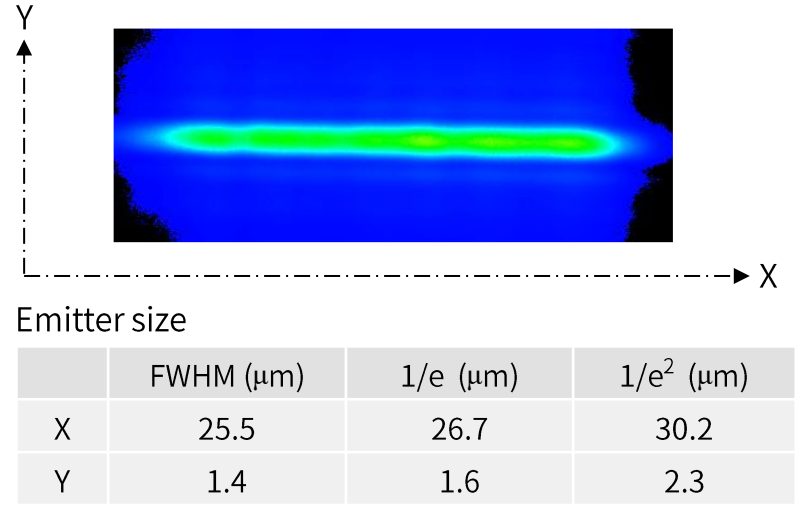
## CW I-L, I-V Temperature



## Far Field Pattern



## Near Field Pattern



# GH04C05U9G Multi-mode Blue Laser Diode

Contact

To the Wavelength

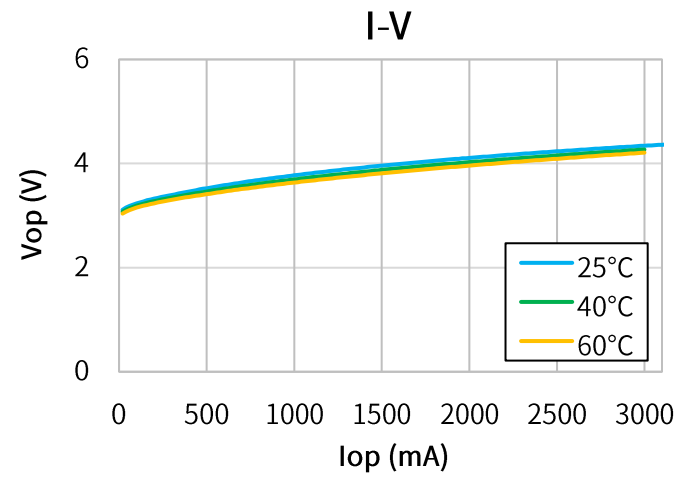
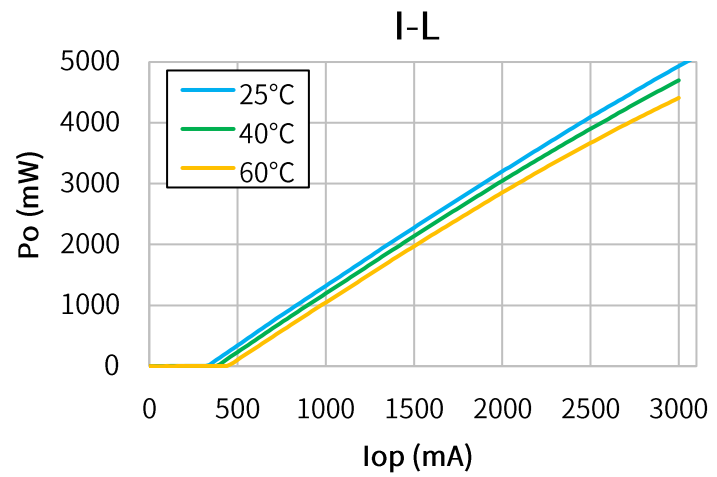
To the Package

## Characteristics

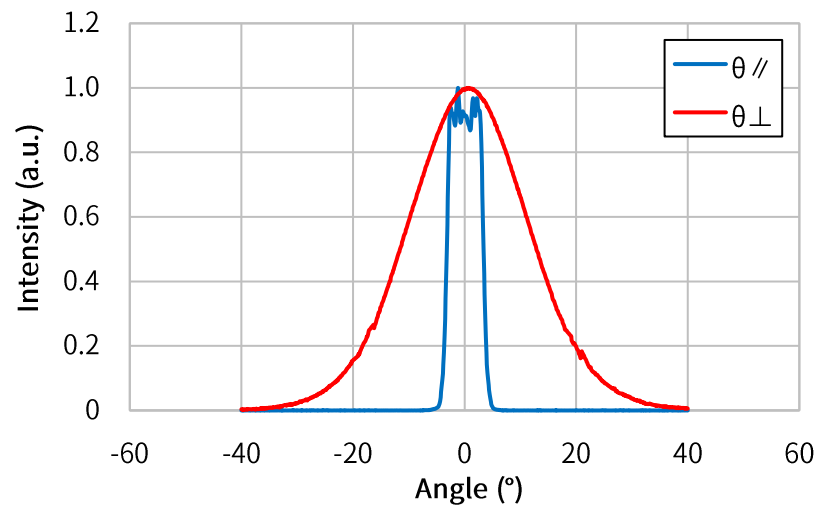
(Tc=25°C, CW)

| Item                          | Conditions                  | Characteristic value (TYP.) |
|-------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)             | Po=5000mW                   | 450nm                       |
| Output                        | —                           | 5000mW                      |
| Threshold current             | —                           | 300mA                       |
| Operating current             | Po=5000mW                   | 2950mA                      |
| Operating voltage             | Po=5000mW                   | 4.1V                        |
| Far Field (1/e <sup>2</sup> ) | Po=5000mW                   | θ// 9°, θ⊥ 46°              |
| Terminal connections          | <a href="#">No.13</a>       |                             |
| Package type                  | <a href="#">TO-CAN φ9.0</a> |                             |

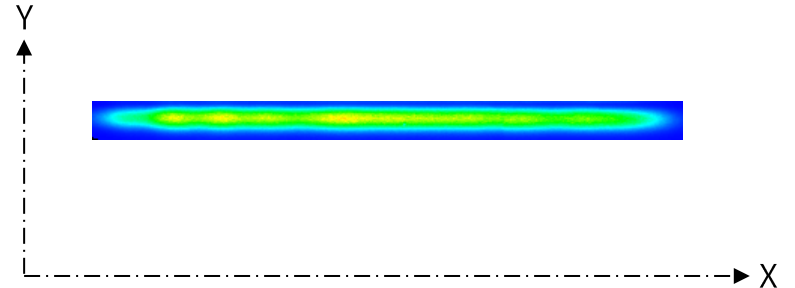
## CW I-L, I-V Temperature



## Far Field Pattern



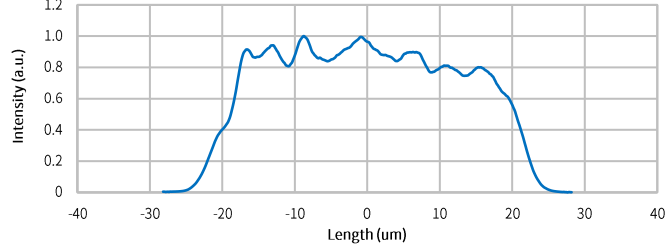
## Near Field Pattern



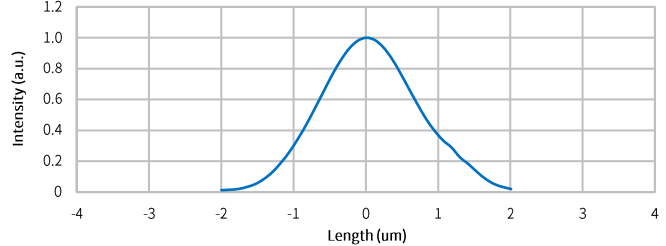
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 39.3      | 42.0     | 45.6                  |
| Y | 1.6       | 3.0      | 3.7                   |

## X Profile



## Y Profile



# GH04850B2G Single-mode Blue Laser Diode

Contact

To the Wavelength

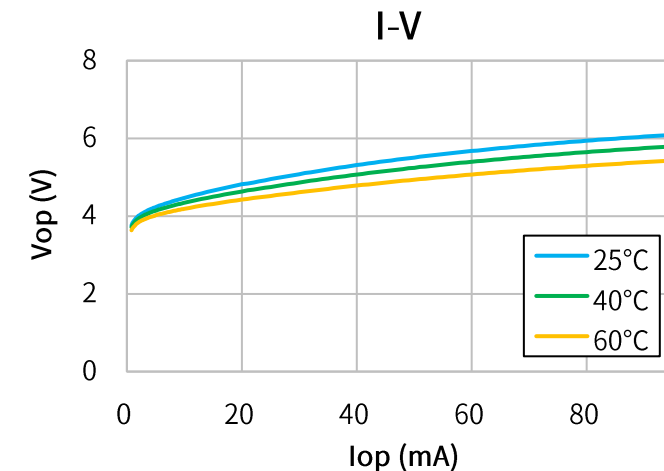
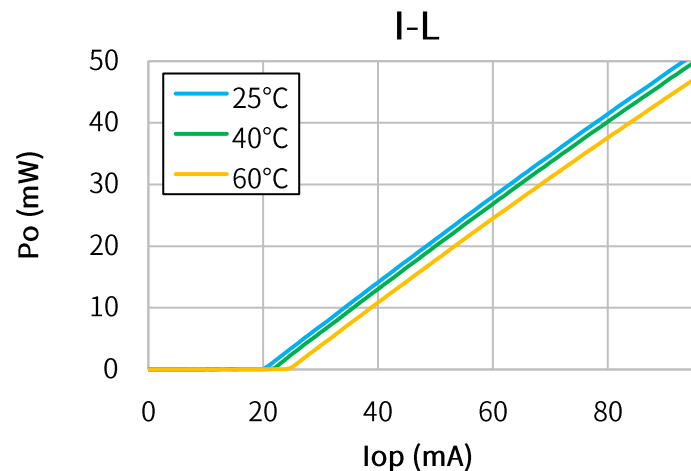
To the Package

## Characteristics

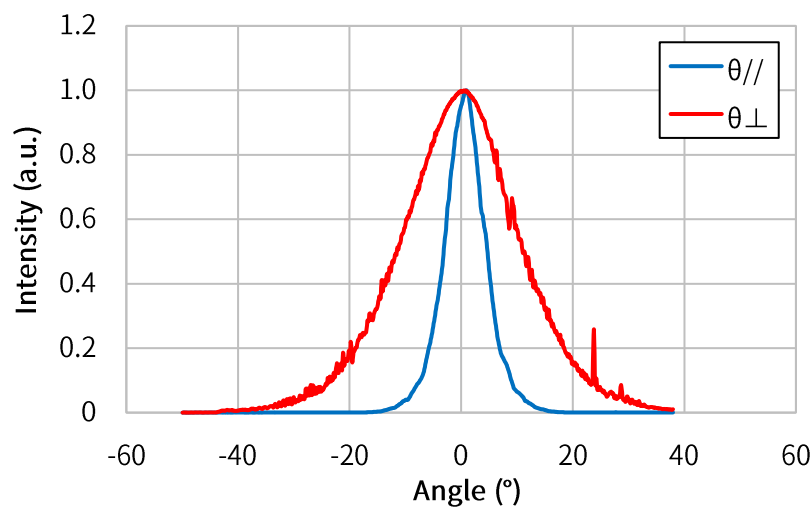
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=50mW                                     | 487nm                                  |
| Output [Max]         | —   | 50mW[55mW]                             |
| Threshold current    | —   | 40mA                                   |
| Operating current    | Po=50mW                                     | 105mA                                  |
| Operating voltage    | Po=50mW                                     | 6.0V                                   |
| Far Field (FWHM)     | Po=50mW                                     | $\theta_{//}$ 8°, $\theta_{\perp}$ 23° |
| Terminal connections | <a href="#">No.8</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

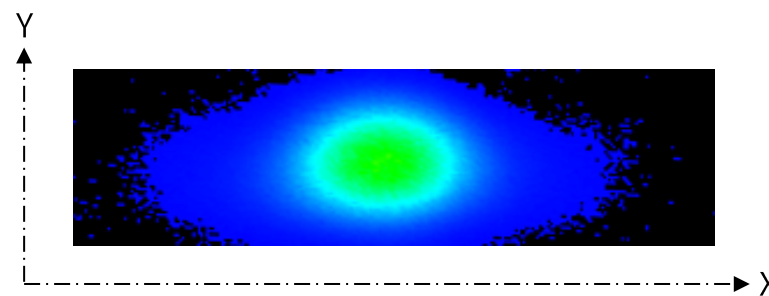
## CW I-L, I-V Temperature



## Far Field Pattern



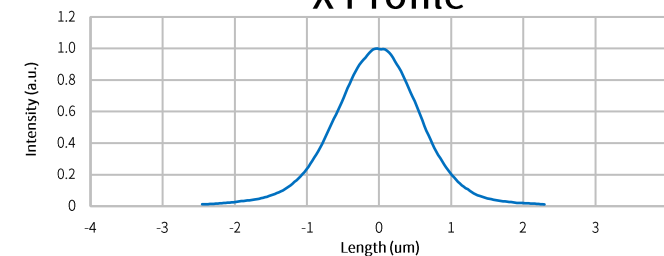
## Near Field Pattern



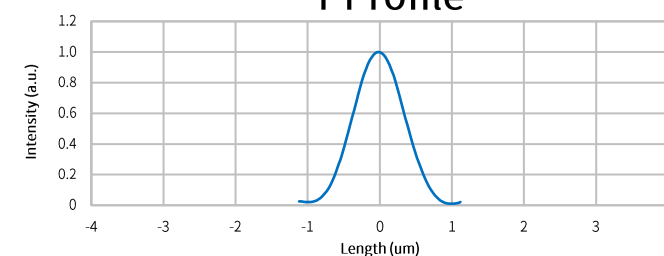
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.3             | 1.6            | 2.4                         |
| Y | 0.8             | 1.0            | 1.4                         |

## X Profile



## Y Profile



# GH05230H1G

## Single-mode Green Laser Diode

[Contact](#)

[To the Wavelength](#)

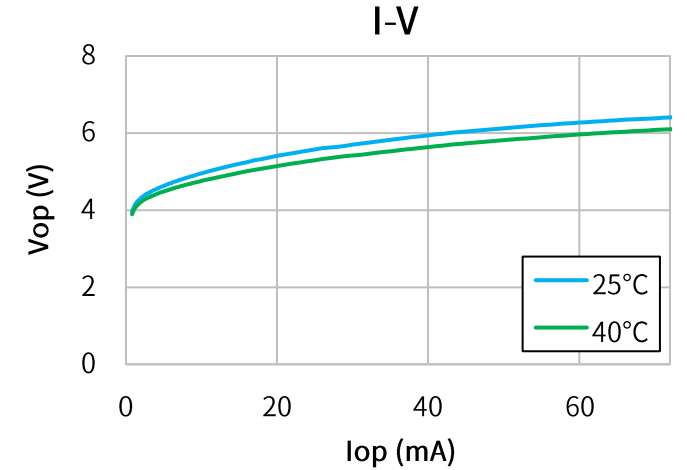
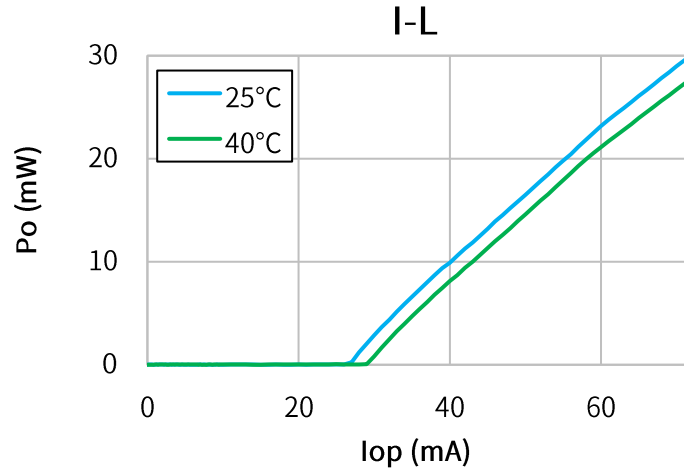
[To the Package](#)

### Characteristics

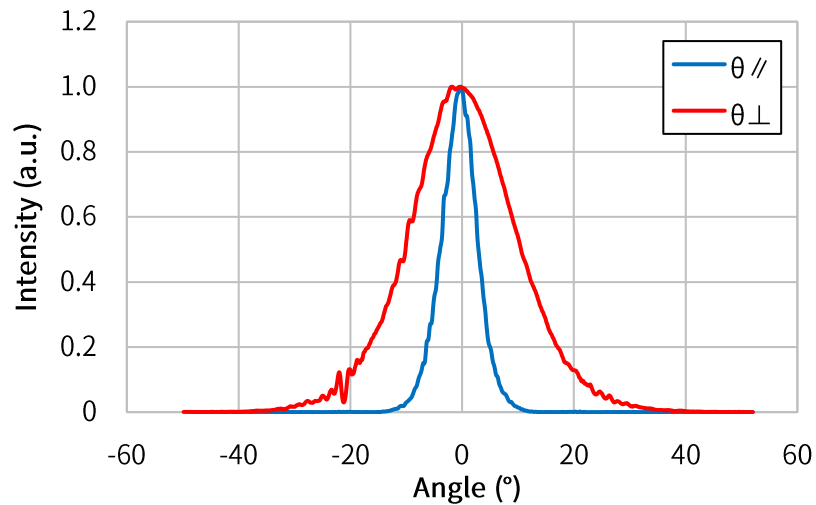
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)              |
|----------------------|---|--|
| Wavelength (Peak)    | Po=30mW                                     | 518nm                                    |
| Output [Max]         | —   | 30mW[35mW]                               |
| Threshold current    | —   | 25mA                                     |
| Operating current    | Po=30mW                                     | 75mA                                     |
| Operating voltage    | Po=30mW                                     | 6.2V                                     |
| Far Field (FWHM)     | Po=30mW                                     | $\theta_{//}$ 7.5°, $\theta_{\perp}$ 22° |
| Terminal connections | <a href="#">No.8</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

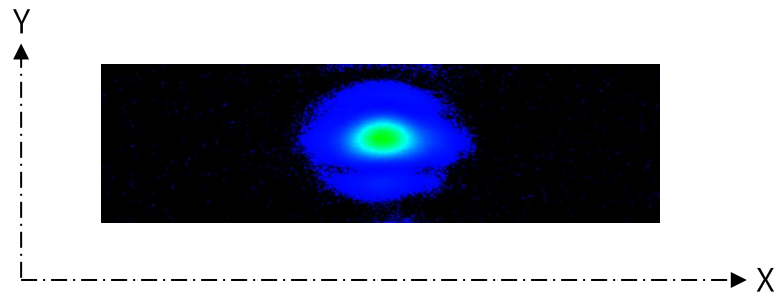
### CW I-L, I-V Temperature



### Far Field Pattern



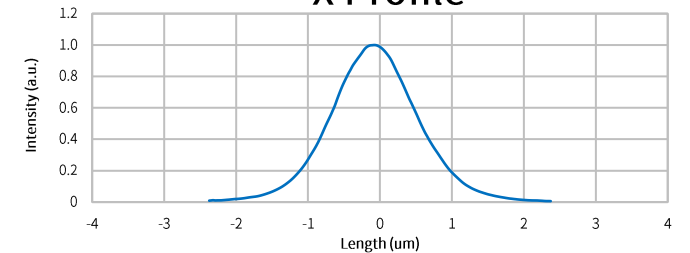
### Near Field Pattern



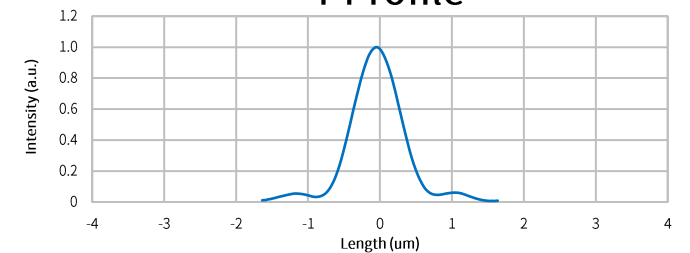
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.3             | 1.5            | 2.4                         |
| Y | 0.7             | 0.9            | 1.2                         |

### X Profile



### Y Profile



# GH05210H2KC Single-mode Green Laser Diode

Contact

To the Wavelength

To the Package

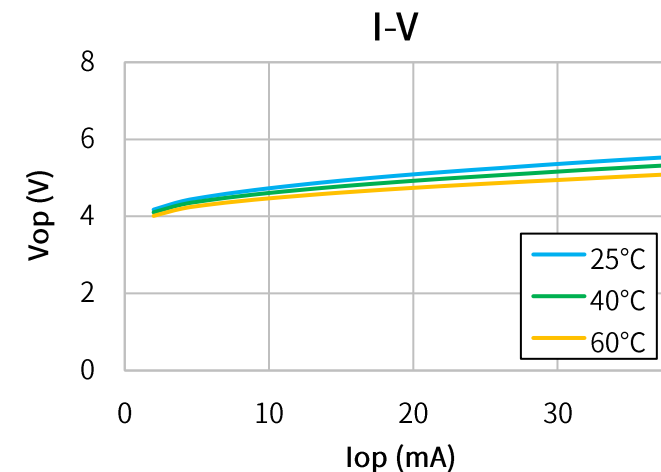
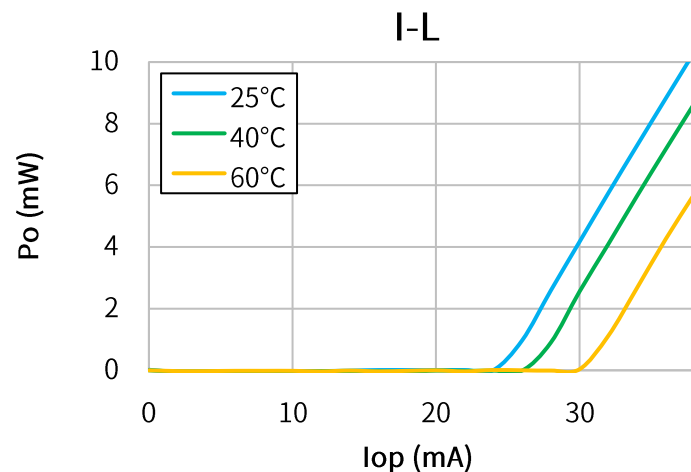
## Characteristics

(T<sub>c</sub>=25°C, CW)

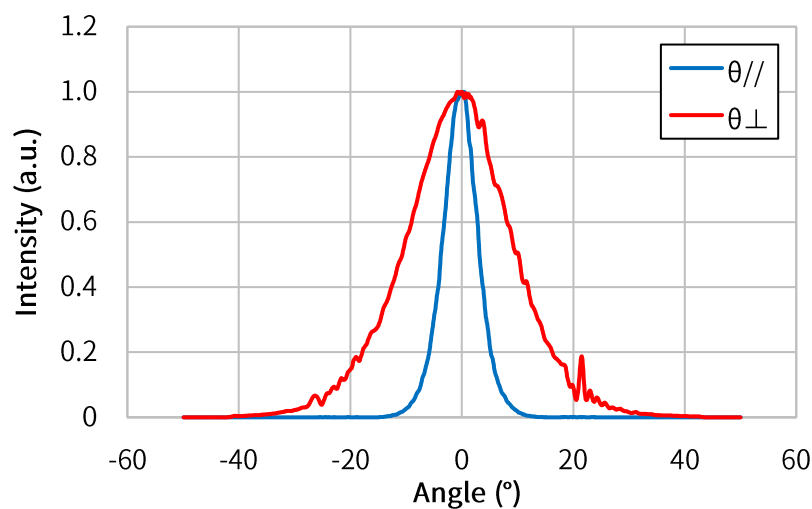
| Item              | Conditions | Characteristic value (TYP.) |
|-------------------|------------|-----------------------------|
| Wavelength (Peak) | Po=10mW    | 520nm                       |
| Output [Max]      | —          | 10mW[15mW]                  |
| Threshold current | —          | 25mA                        |
| Operating current | Po=10mW    | 35mA                        |
| Operating voltage | Po=10mW    | 5.8V                        |
| Far Field (FWHM)  | Po=10mW    | θ// 7°, θ⊥ 22°              |

|                      |                             |
|----------------------|-----------------------------|
| Terminal connections | <a href="#">No.4</a>        |
| Package type         | <a href="#">TO-CAN φ5.6</a> |

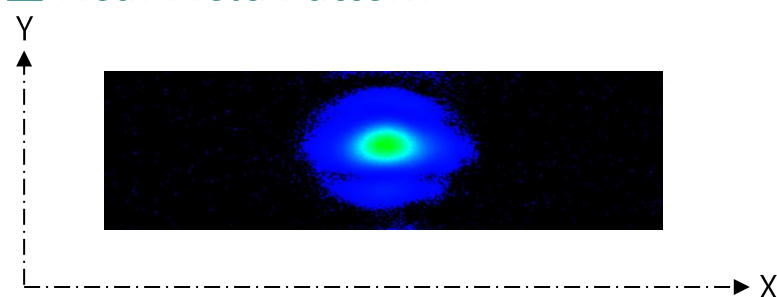
## CW I-L, I-V Temperature



## Far Field Pattern



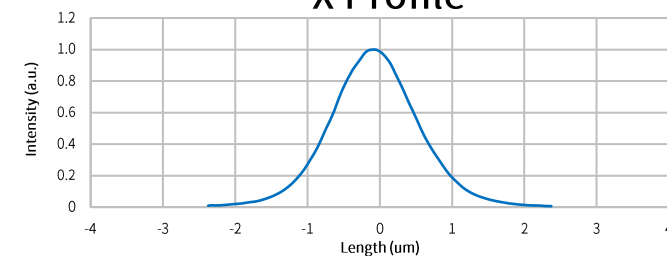
## Near Field Pattern



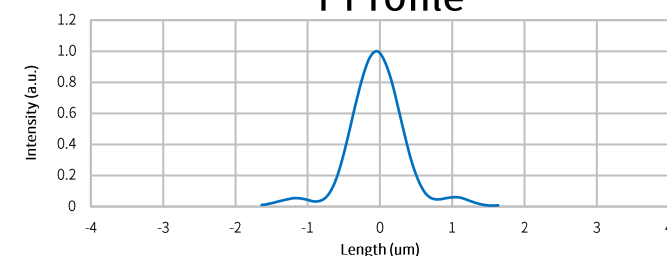
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 1.3       | 1.5      | 2.4                   |
| Y | 0.7       | 0.9      | 1.2                   |

## X Profile



## Y Profile



# GH05210H5K Single-mode Green Laser Diode

✉ Contact

↶ To the Wavelength

↶ To the Package

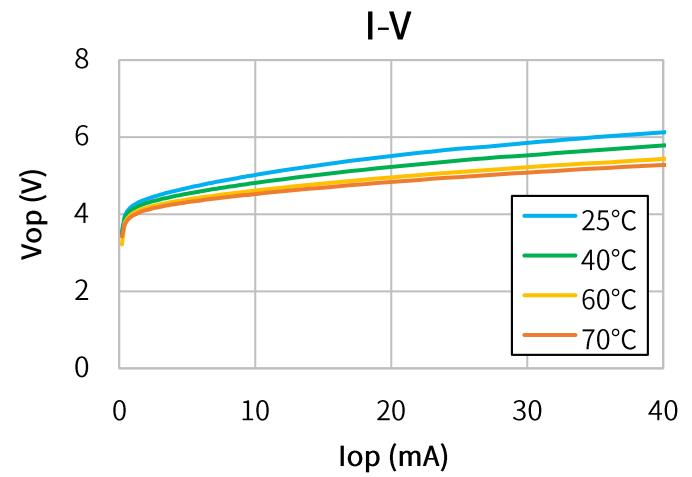
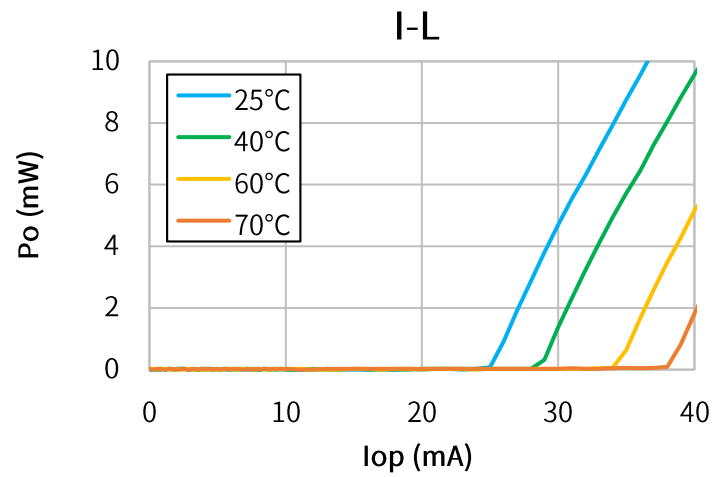
## ■ Characteristics

(T<sub>c</sub>=25°C, CW)

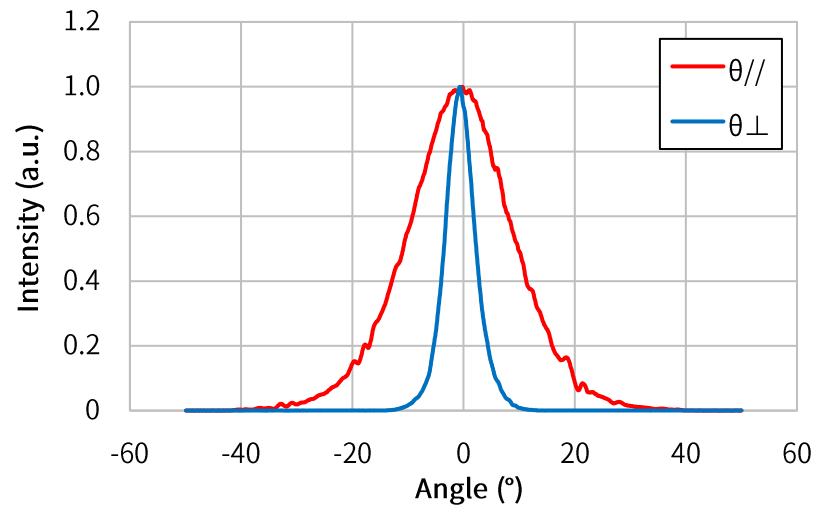
| Item              | Conditions | Characteristic value (TYP.) |
|-------------------|------------|-----------------------------|
| Wavelength (Peak) | Po=10mW    | 520nm                       |
| Output [Max]      | —          | 10mW[15mW]                  |
| Threshold current | —          | 25mA                        |
| Operating current | Po=10mW    | 35mA                        |
| Operating voltage | Po=10mW    | 5.8V                        |
| Far Field (FWHM)  | Po=10mW    | θ// 7°, θ⊥ 22°              |

|                      |                             |
|----------------------|-----------------------------|
| Terminal connections | <a href="#">No.4</a>        |
| Package type         | <a href="#">TO-CAN φ3.8</a> |

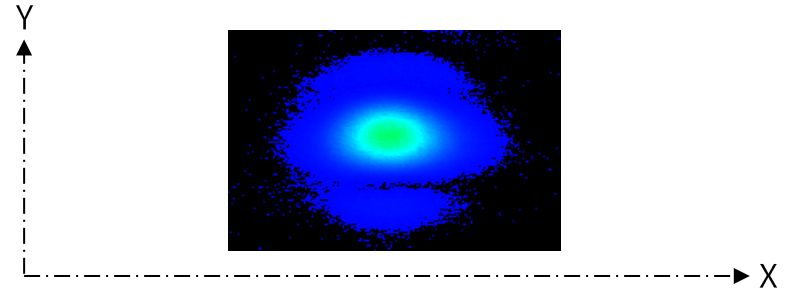
## ■ CW I-L, I-V Temperature



## ■ Far Field Pattern



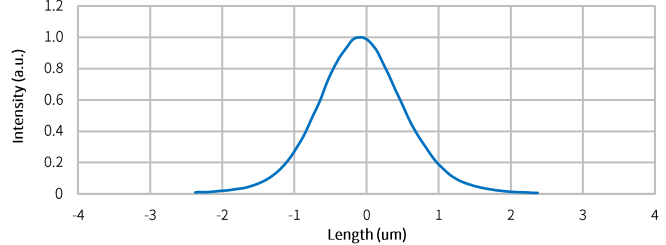
## ■ Near Field Pattern



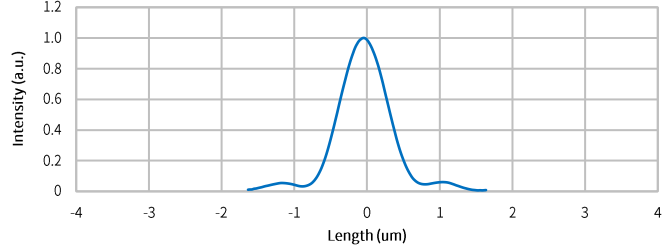
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 1.3       | 1.6      | 2.4                   |
| Y | 0.7       | 0.9      | 1.2                   |

## X Profile



## Y Profile



# GH05230H2KC Single-mode Green Laser Diode

Contact

To the Wavelength

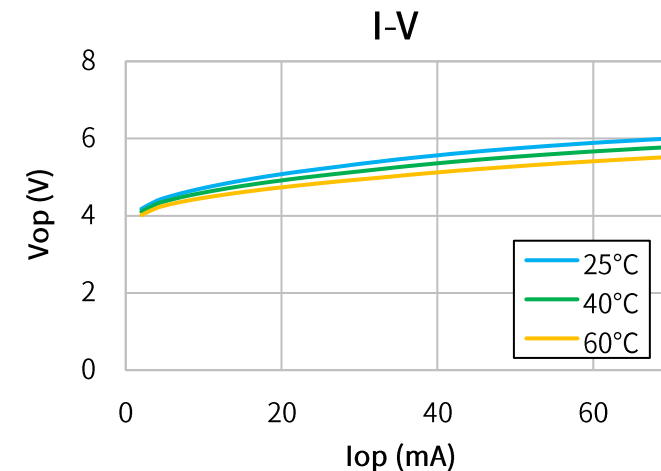
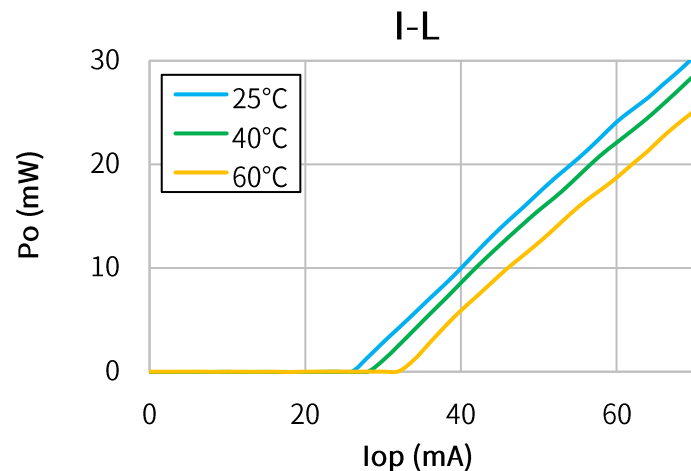
To the Package

## Characteristics

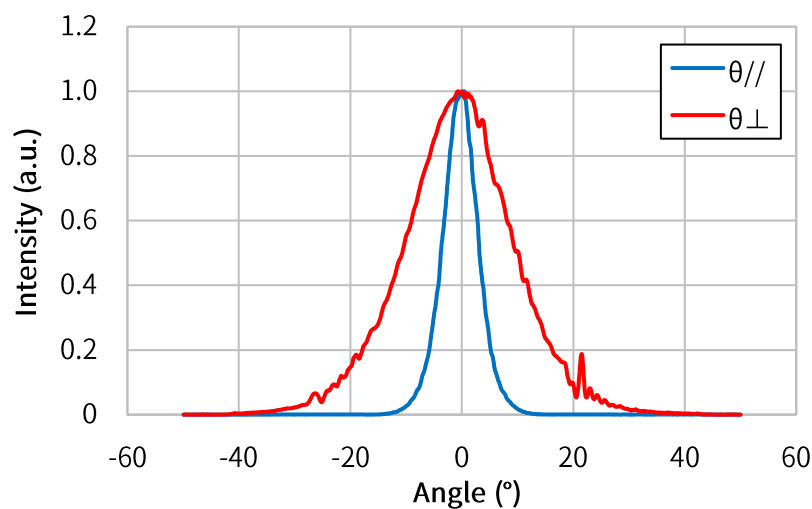
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=30mW                                     | 520nm                                  |
| Output [Max]         | —   | 30mW[35mW]                             |
| Threshold current    | —   | 25mA                                   |
| Operating current    | Po=30mW                                     | 70mA                                   |
| Operating voltage    | Po=30mW                                     | 6.5V                                   |
| Far Field (FWHM)     | Po=30mW                                     | $\theta_{//}$ 7°, $\theta_{\perp}$ 22° |
| Terminal connections | <a href="#">No.4</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

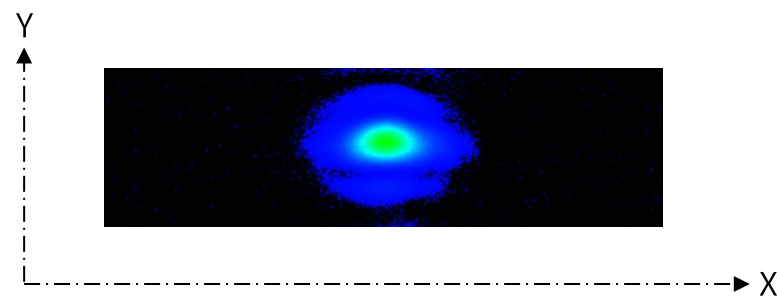
## CW I-L, I-V Temperature



## Far Field Pattern



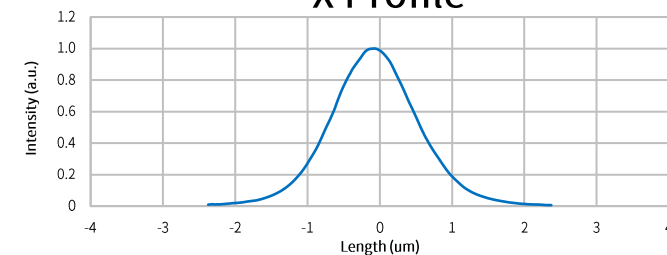
## Near Field Pattern



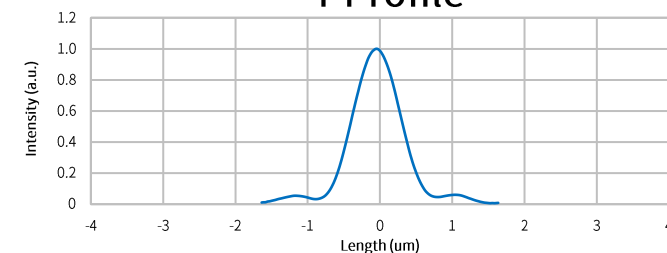
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.3             | 1.5            | 2.4                         |
| Y | 0.7             | 0.9            | 1.2                         |

## X Profile



## Y Profile



# GH05250F2K Single-mode Green Laser Diode

Contact

To the Wavelength

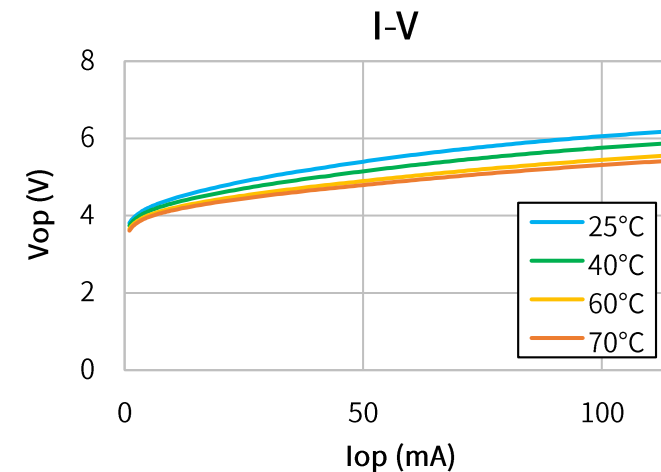
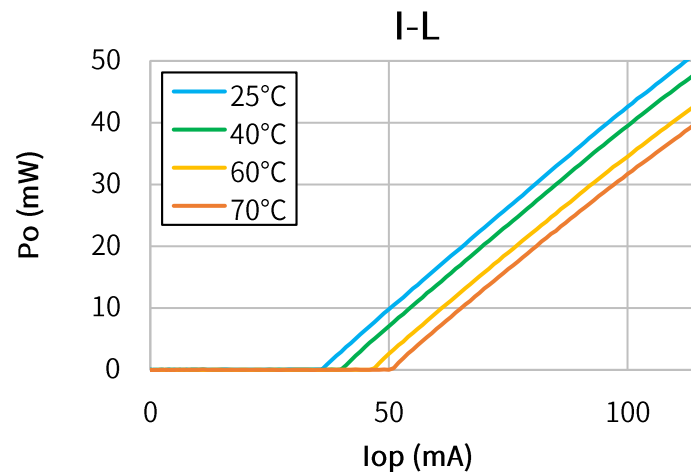
To the Package

## Characteristics

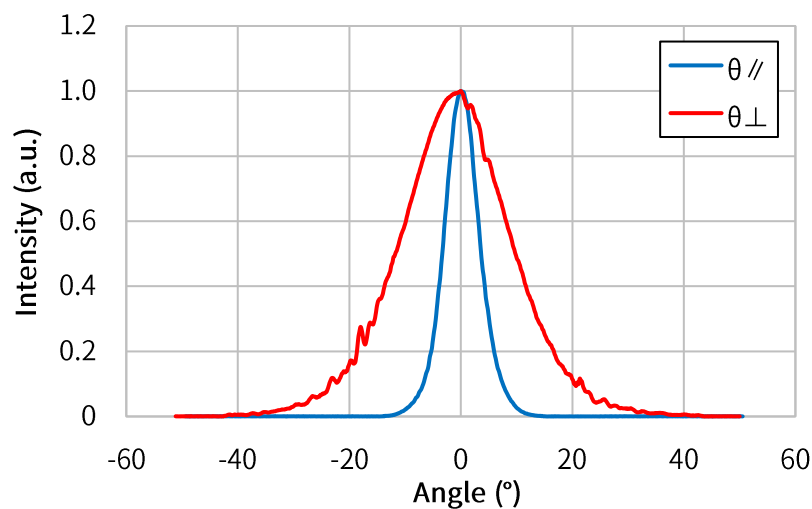
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=50mW                                     | 520nm                                  |
| Output [Max]         | —   | 50mW[55mW]                             |
| Threshold current    | —   | 40mA                                   |
| Operating current    | Po=50mW                                     | 100mA                                  |
| Operating voltage    | Po=50mW                                     | 5.9V                                   |
| Far Field (FWHM)     | Po=50mW                                     | $\theta_{//}$ 7°, $\theta_{\perp}$ 22° |
| Terminal connections | <a href="#">No.4</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

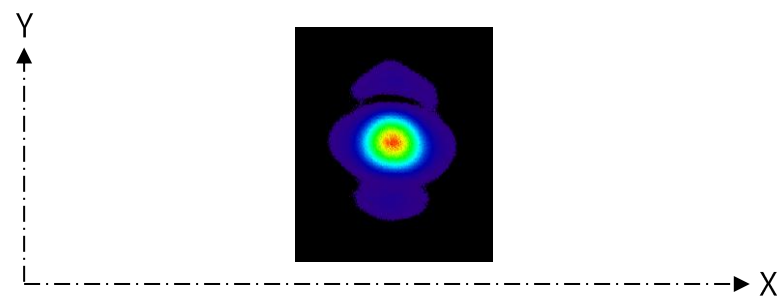
## CW I-L, I-V Temperature



## Far Field Pattern



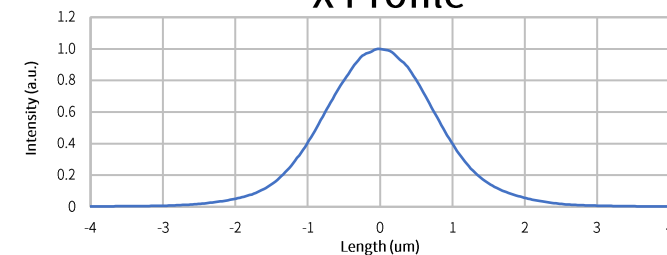
## Near Field Pattern



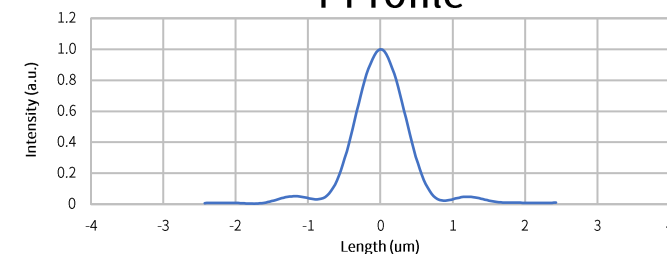
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.8             | 2.1            | 3.0                         |
| Y | 0.8             | 0.9            | 1.2                         |

## X Profile



## Y Profile



# GH05280E2KC Single-mode Green Laser Diode

Contact

To the Wavelength

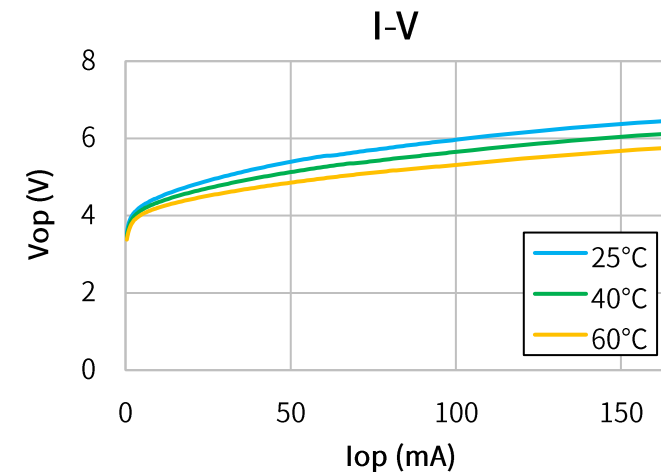
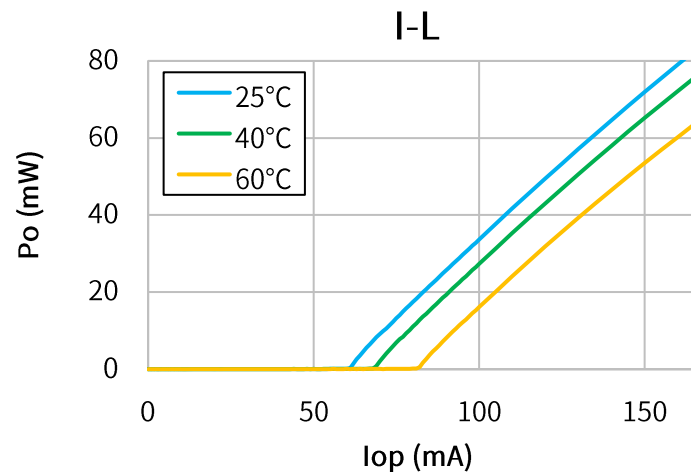
To the Package

## Characteristics

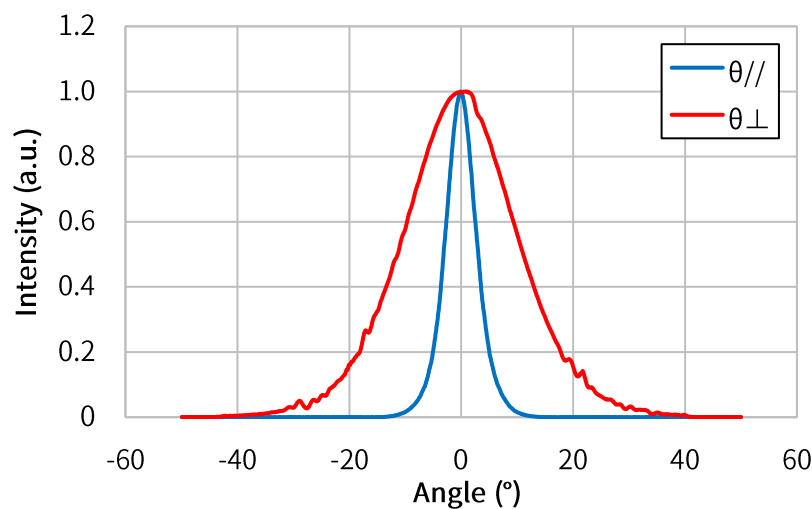
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=80mW                                     | 520nm                                  |
| Output [Max]         | —   | 80mW[85mW]                             |
| Threshold current    | —   | 50mA                                   |
| Operating current    | Po=80mW                                     | 150mA                                  |
| Operating voltage    | Po=80mW                                     | 6.5V                                   |
| Far Field (FWHM)     | Po=80mW                                     | $\theta_{//}$ 7°, $\theta_{\perp}$ 23° |
| Terminal connections | <a href="#">No.4</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

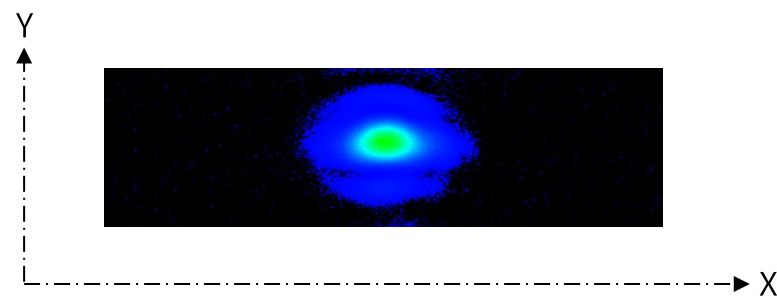
## CW I-L, I-V Temperature



## Far Field Pattern



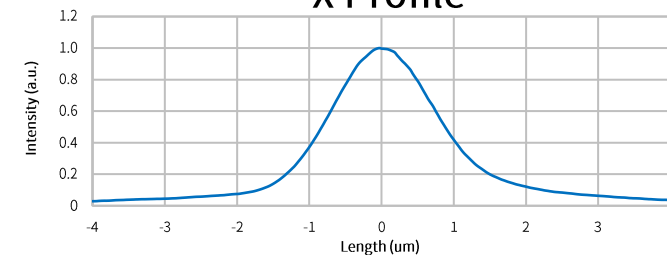
## Near Field Pattern



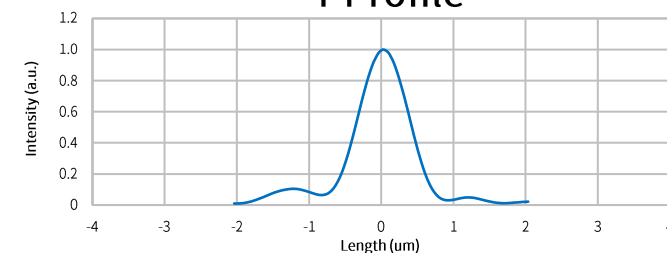
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.3             | 1.5            | 2.4                         |
| Y | 0.7             | 0.9            | 1.2                         |

## X Profile



## Y Profile



# GH05280E5K Single-mode Green Laser Diode

Contact

To the Wavelength

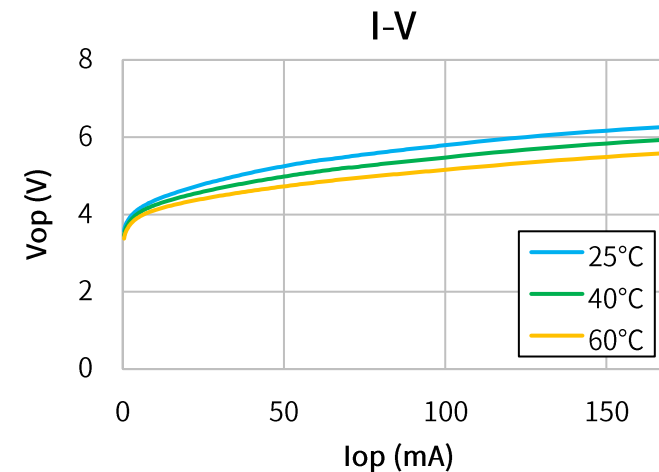
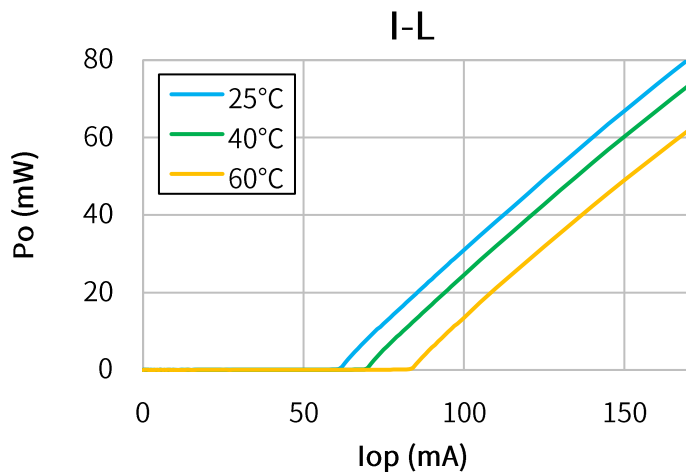
To the Package

## Characteristics

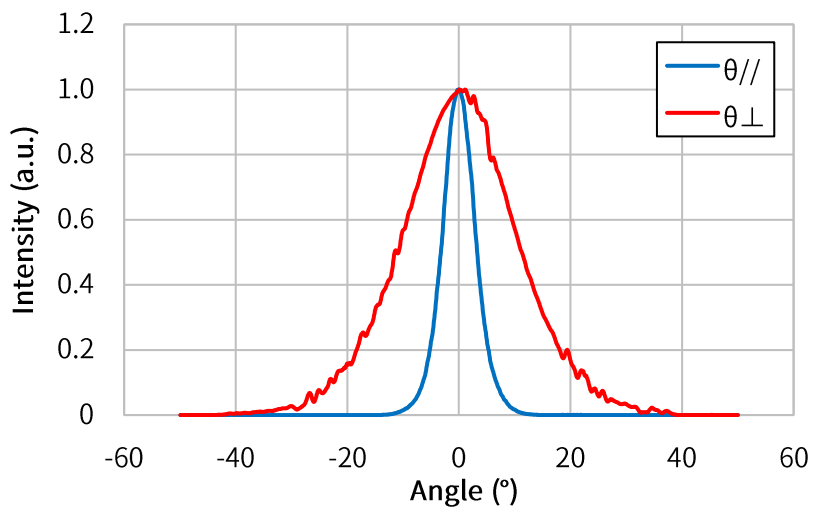
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=80mW                                     | 520nm                                  |
| Output [Max]         | —   | 80mW[85mW]                             |
| Threshold current    | —   | 65mA                                   |
| Operating current    | Po=80mW                                     | 180mA                                  |
| Operating voltage    | Po=80mW                                     | 6.5V                                   |
| Far Field (FWHM)     | Po=80mW                                     | $\theta_{//}$ 7°, $\theta_{\perp}$ 23° |
| Terminal connections | <a href="#">No.4</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>3.8</a> |  |

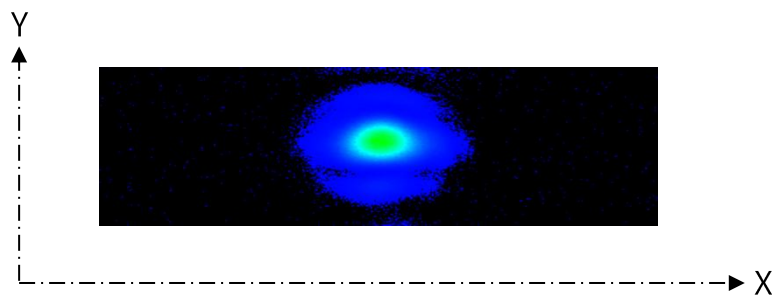
## CW I-L, I-V Temperature



## Far Field Pattern



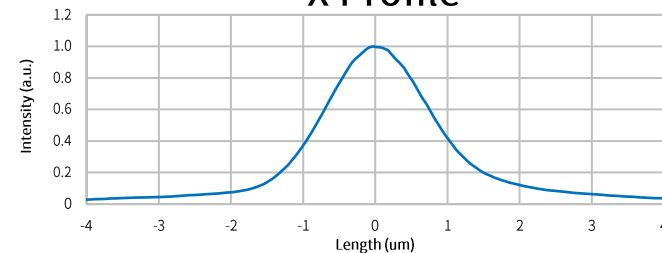
## Near Field Pattern



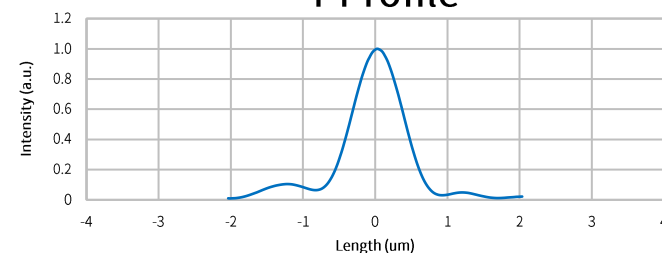
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.3             | 1.5            | 2.4                         |
| Y | 0.7             | 0.9            | 1.2                         |

## X Profile



## Y Profile



# GH0521DE2G Single-mode Green Laser Diode

Contact

To the Wavelength

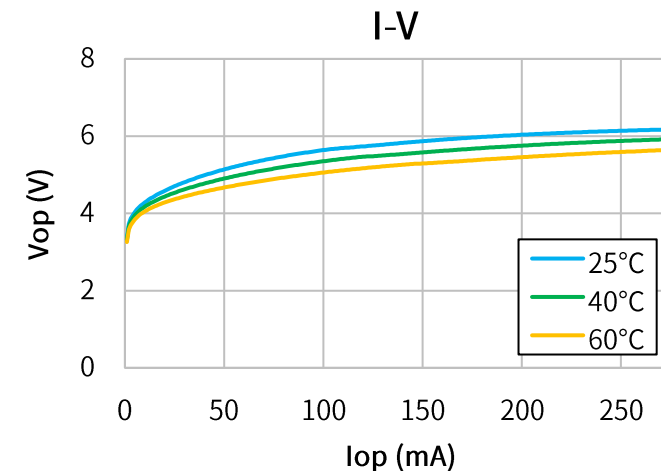
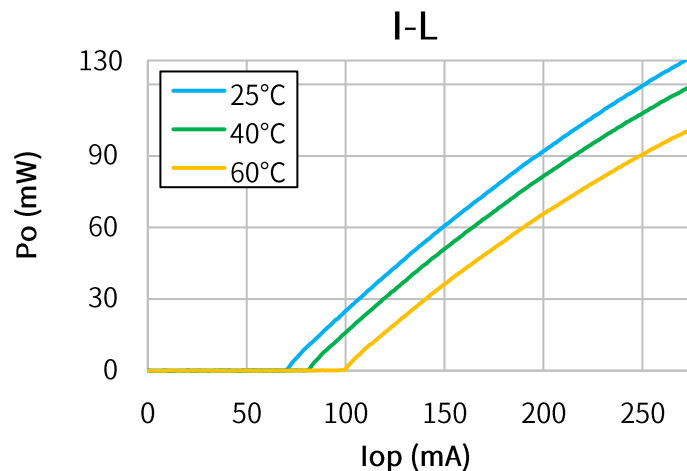
To the Package

## Characteristics

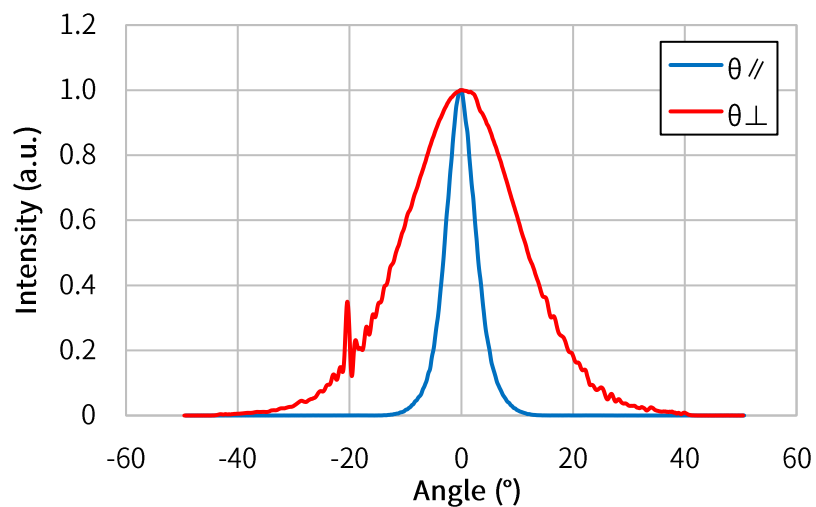
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=130mW                                    | 520nm                                  |
| Output [Max]         | —   | 130mW<br>[135mW]                       |
| Threshold current    | —   | 70mA                                   |
| Operating current    | Po=130mW                                    | 270mA                                  |
| Operating voltage    | Po=130mW                                    | 6.7V                                   |
| Far Field (FWHM)     | Po=130mW                                    | $\theta_{//}$ 8°, $\theta_{\perp}$ 22° |
| Terminal connections | <a href="#">No.8</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

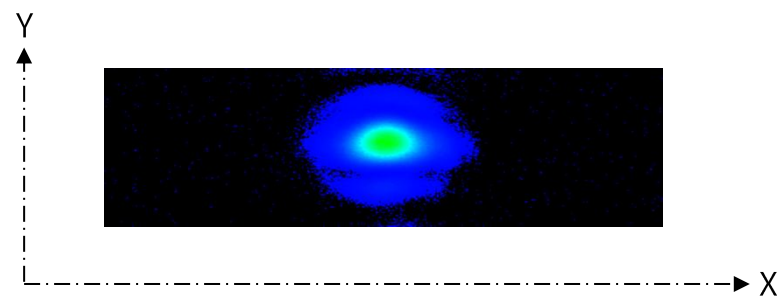
## CW I-L, I-V Temperature



## Far Field Pattern



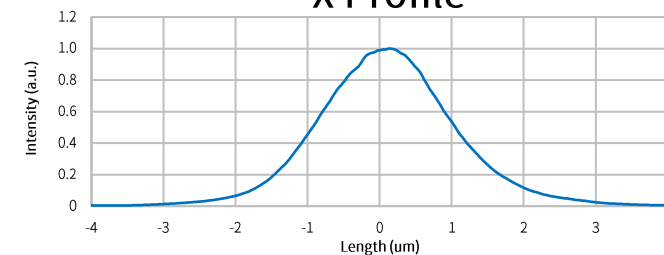
## Near Field Pattern



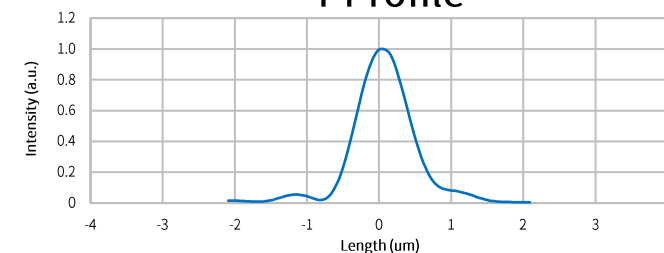
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 1.3             | 1.5            | 2.4                         |
| Y | 0.7             | 0.9            | 1.2                         |

## X Profile



## Y Profile



# GH0523AD2G Multi-mode Green Laser Diode

Contact

To the Wavelength

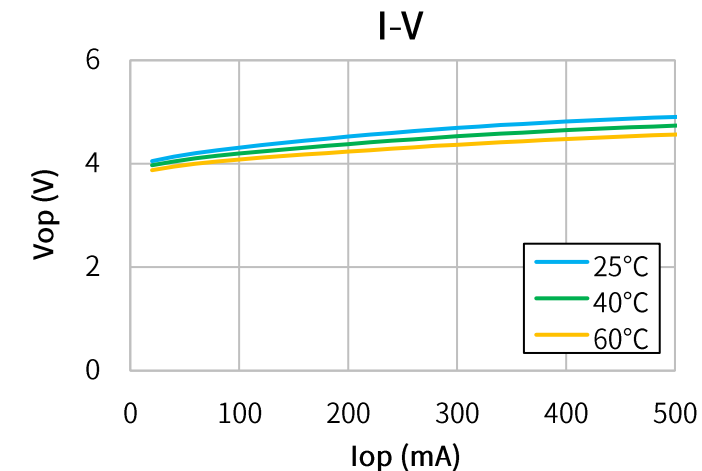
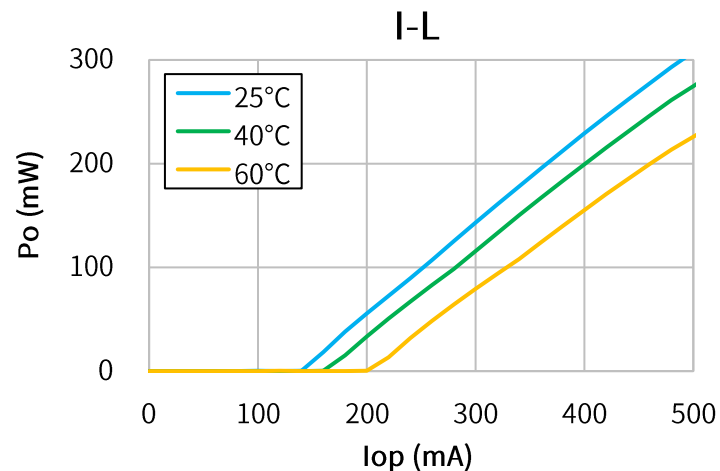
To the Package

## Characteristics

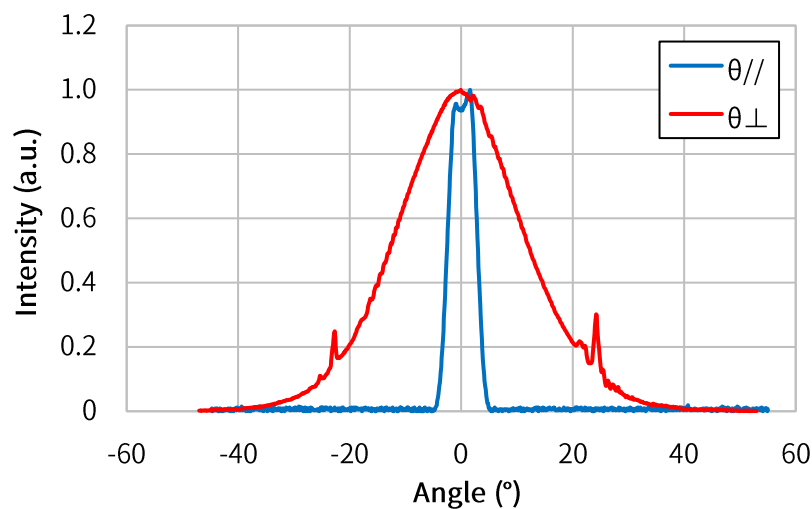
(T<sub>c</sub>=25°C, CW)

| Item                 | Conditions                  | Characteristic value (TYP.) |
|----------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)    | Po=300mW                    | 520nm                       |
| Output               | —                           | 300mW                       |
| Threshold current    | —                           | 100mA                       |
| Operating current    | Po=300mW                    | 500mA                       |
| Operating voltage    | Po=300mW                    | 5.2V                        |
| Far Field (FWHM)     | Po=300mW                    | θ// 7°, θ⊥ 23°              |
| Terminal connections | <a href="#">No.9</a>        |                             |
| Package type         | <a href="#">T0-CAN φ5.6</a> |                             |

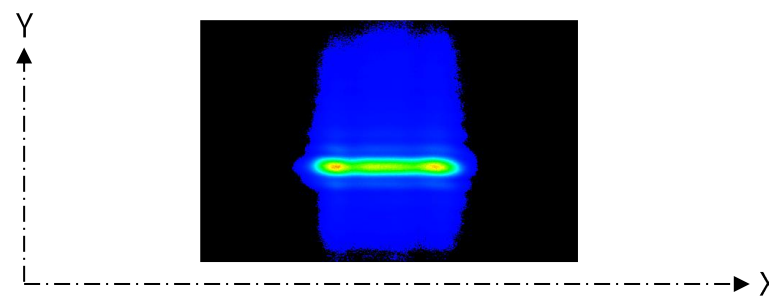
## CW I-L, I-V Temperature



## Far Field Pattern



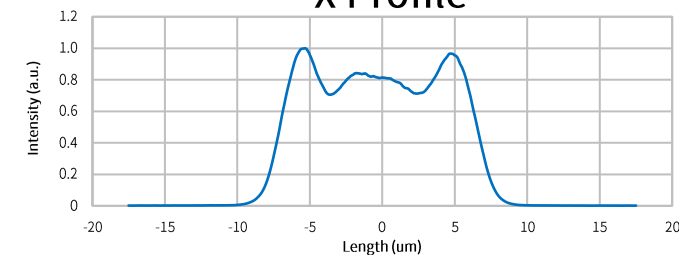
## Near Field Pattern



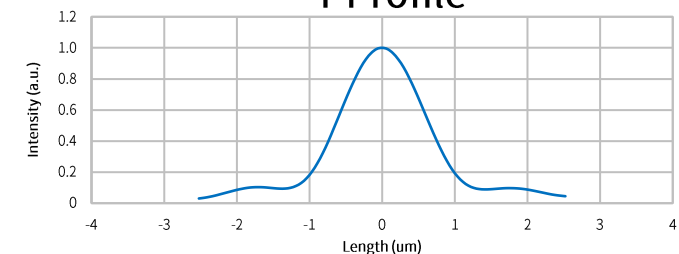
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 13.6      | 14.2     | 15.6                  |
| Y | 1.3       | 1.6      | 2.2                   |

## X Profile



## Y Profile



# GH05C01A9G Multi-mode Green Laser Diode

[Contact](#)

[To the Wavelength](#)

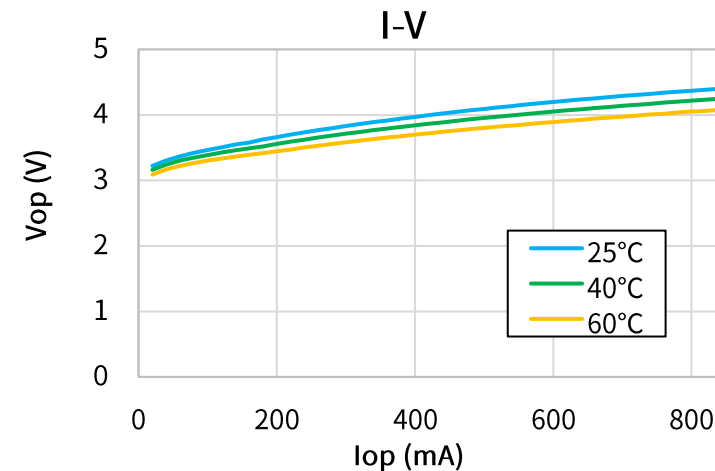
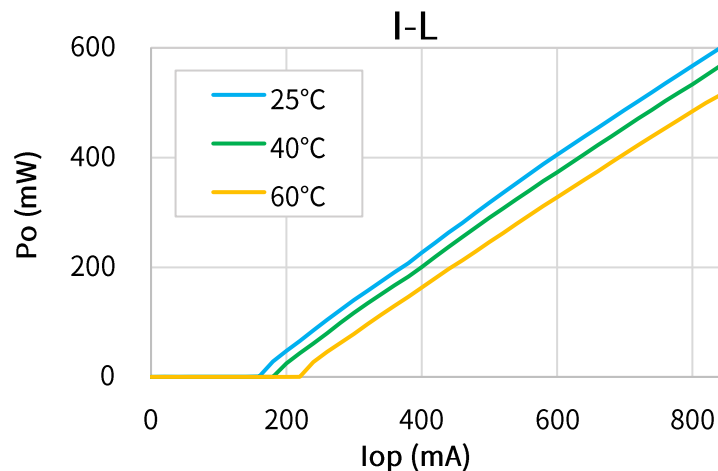
[To the Package](#)

## Characteristics

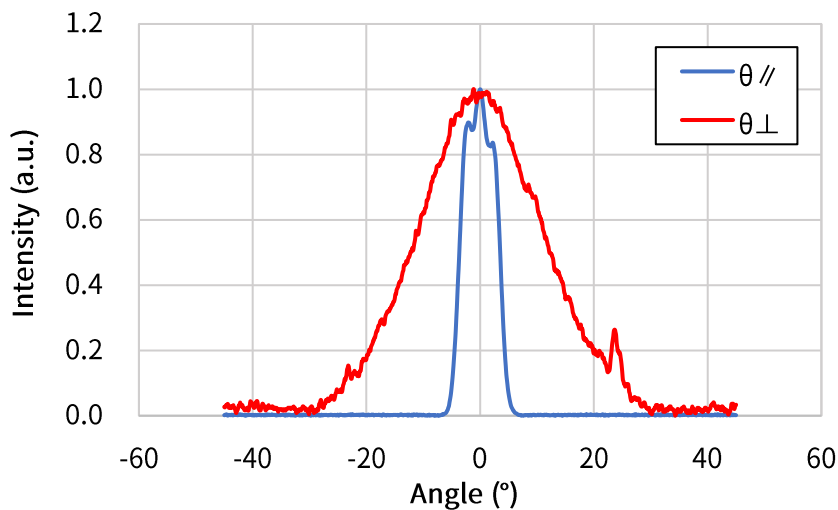
(Tc=25°C, CW)

| Item                           | Conditions                                  | Characteristic value (TYP.)            |
|--------------------------------|---|--|
| Wavelength (Peak)              | Po=600mW                                    | 520nm                                  |
| Output                         | —   | 600mW                                  |
| Threshold current              | —   | 180mA                                  |
| Operating current              | Po=600mW                                    | 840mA                                  |
| Operating voltage              | Po=600mW                                    | 4.4V                                   |
| Far Field ( 1/e <sup>2</sup> ) | Po=600mW                                    | $\theta_{//}$ 9°, $\theta_{\perp}$ 44° |
| Terminal connections           | <a href="#">No.9</a>                        |  |
| Package type                   | <a href="#">TO-CAN <math>\phi</math>9.0</a> |  |

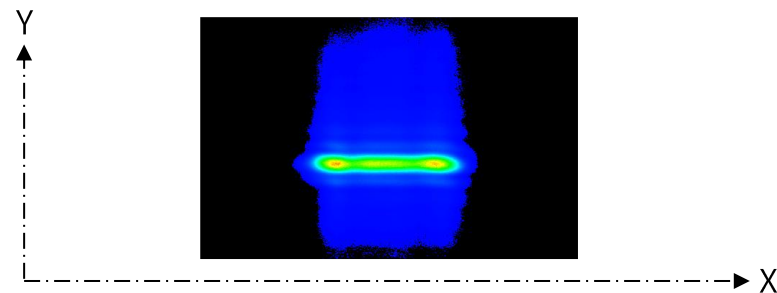
## CW I-L, I-V Temperature



## Far Field Pattern



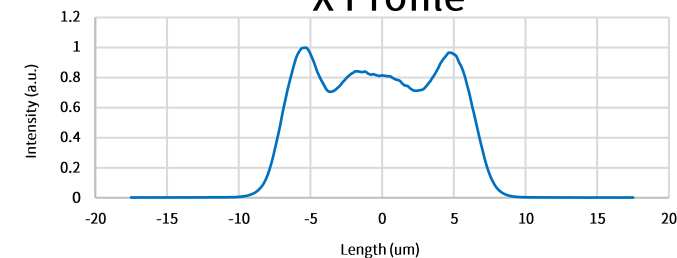
## Near Field Pattern



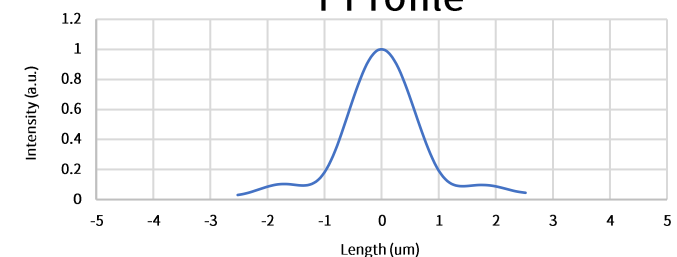
Emitter size

|   | FWHM ( $\mu$ m) | 1/e ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|----------------|-----------------------------|
| X | 13.6            | 14.2           | 15.6                        |
| Y | 1.3             | 1.6            | 2.2                         |

## X Profile



## Y Profile



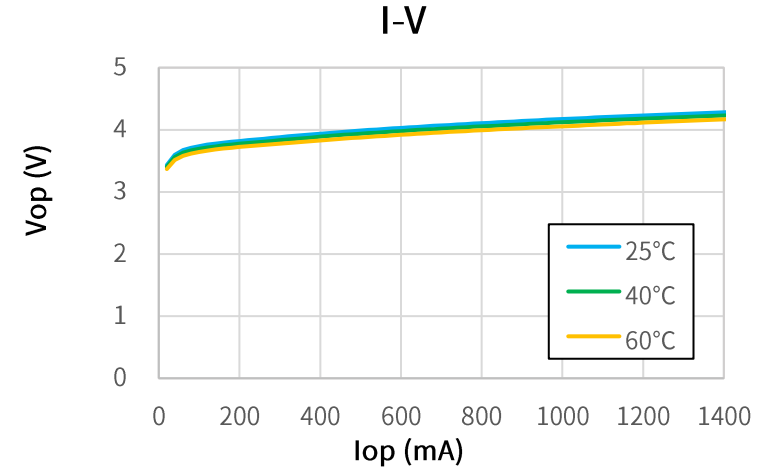
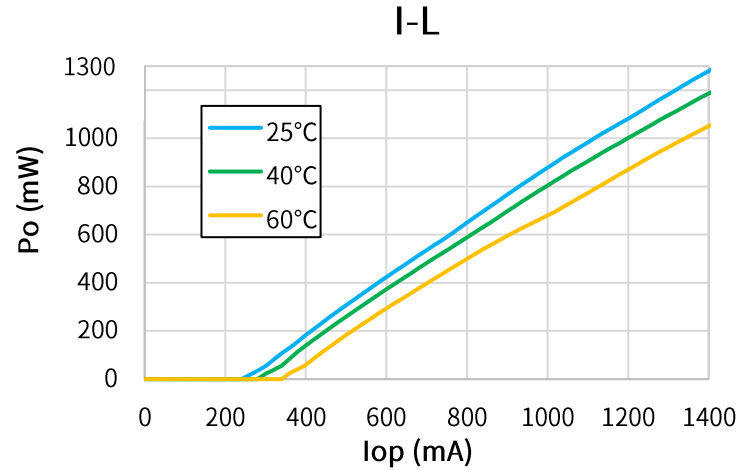
# GH05C01D9G Multi-mode Green Laser Diode

## Characteristics

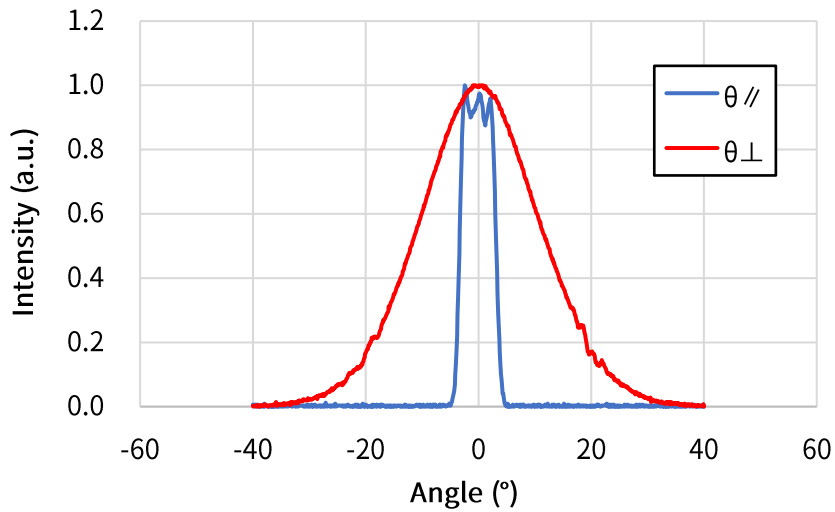
(Tc=25°C, CW)

| Item                          | Conditions                  | Characteristic value (TYP.) |
|-------------------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)             | Po=1300mW                   | 525nm                       |
| Output                        | —                           | 1300mW                      |
| Threshold current             | —                           | 250mA                       |
| Operating current             | Po=1300mW                   | 1400mA                      |
| Operating voltage             | Po=1300mW                   | 4.3V                        |
| Far Field (1/e <sup>2</sup> ) | Po=1300mW                   | θ// 8°, θ⊥ 42°              |
| Terminal connections          | <a href="#">No.13</a>       |                             |
| Package type                  | <a href="#">TO-CAN φ9.0</a> |                             |

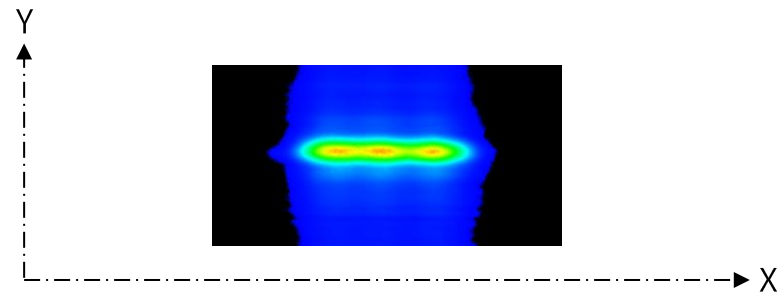
## CW I-L, I-V Temperature



## Far Field Pattern



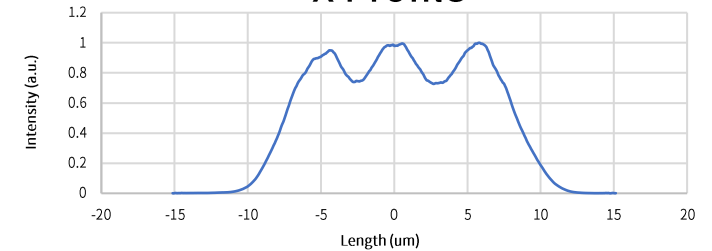
## Near Field Pattern



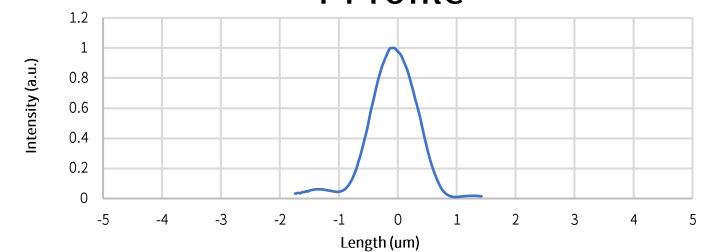
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 16.0      | 17.1     | 19.5                  |
| Y | 0.9       | 1.1      | 1.5                   |

## X Profile



## Y Profile



# GH0637AA2G Multi-mode Red Laser Diode

Contact

To the Wavelength

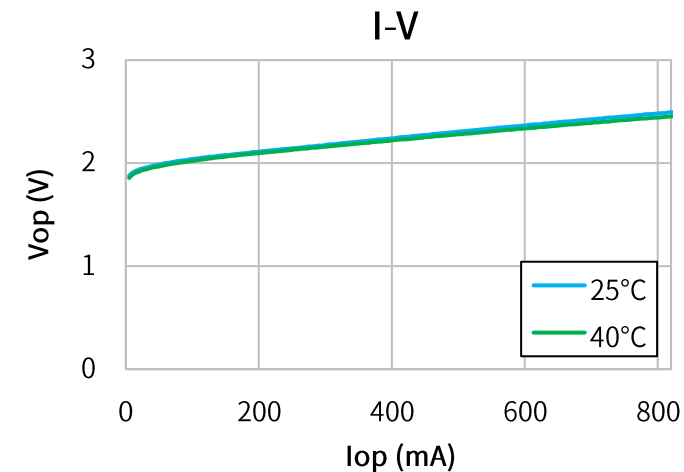
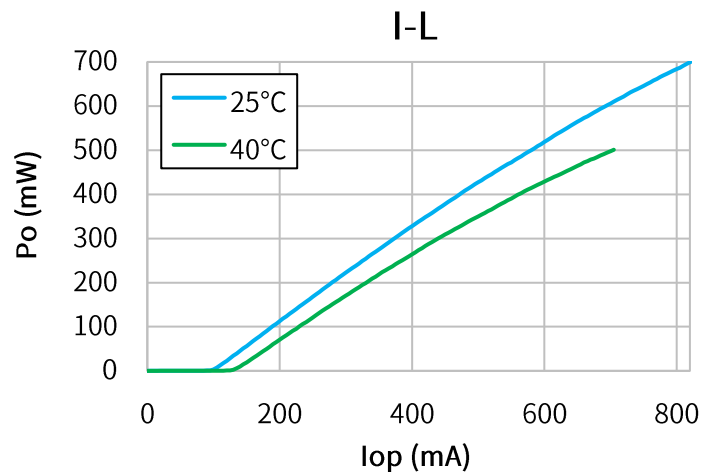
To the Package

## Characteristics

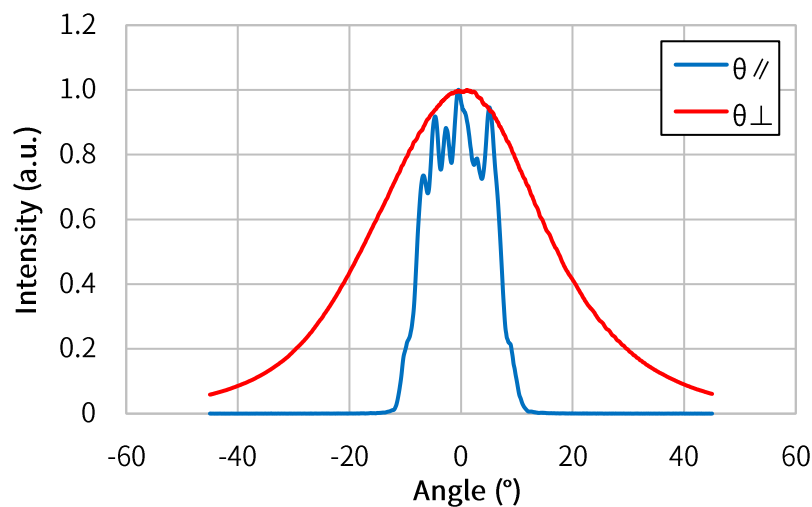
(T<sub>c</sub>=25°C, CW)

| Item                 | Conditions                  | Characteristic value (TYP.) |
|----------------------|-----------------------------|-----------------------------|
| Wavelength (Peak)    | Po=700mW                    | 638nm                       |
| Output [Max]         | —                           | 700mW                       |
| Threshold current    | —                           | 110mA                       |
| Operating current    | Po=700mW                    | 810mA                       |
| Operating voltage    | Po=700mW                    | 2.5V                        |
| Far Field (FWHM)     | Po=700mW                    | θ// 16°, θ⊥ 35°             |
| Terminal connections | <a href="#">No.9</a>        |                             |
| Package type         | <a href="#">TO-CAN φ5.6</a> |                             |

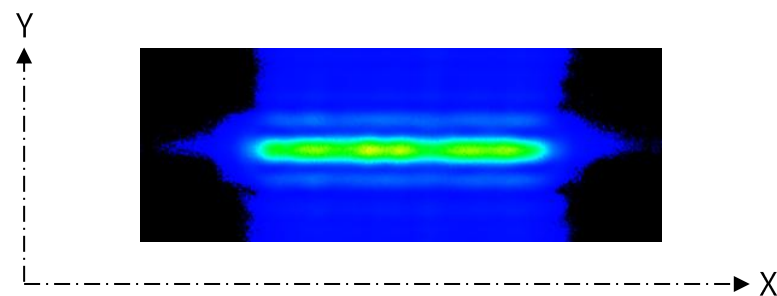
## CW I-L, I-V Temperature



## Far Field Pattern



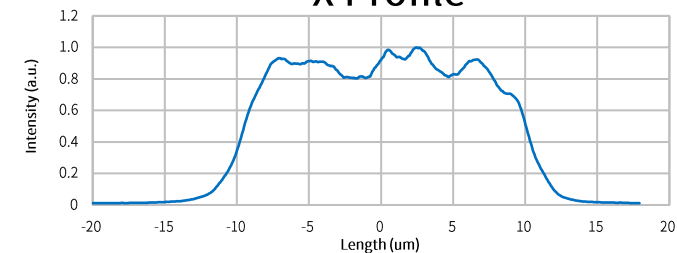
## Near Field Pattern



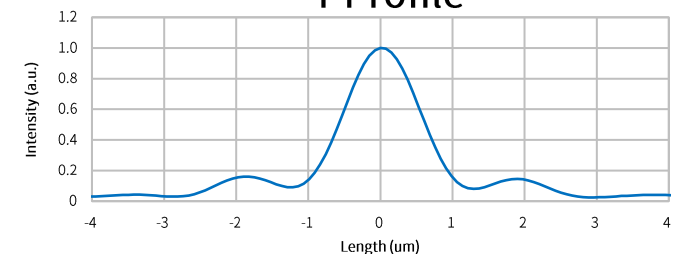
Emitter size

|   | FWHM (μm) | 1/e (μm) | 1/e <sup>2</sup> (μm) |
|---|-----------|----------|-----------------------|
| X | 19.5      | 20.4     | 22.9                  |
| Y | 1.2       | 1.5      | 2.1                   |

## X Profile



## Y Profile



# GH06311B2GC

## Single-mode Red Laser Diode

[Contact](#)

[To the Wavelength](#)

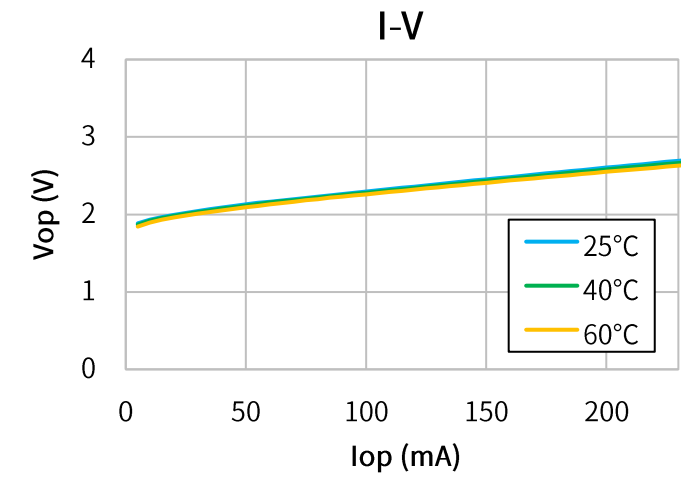
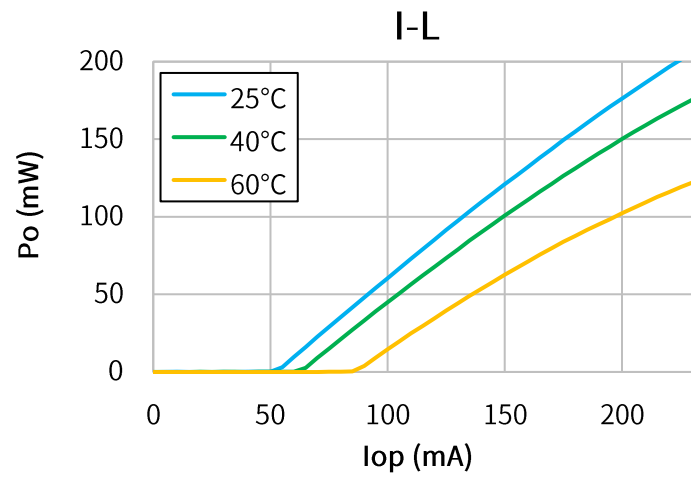
[To the Package](#)

### Characteristics

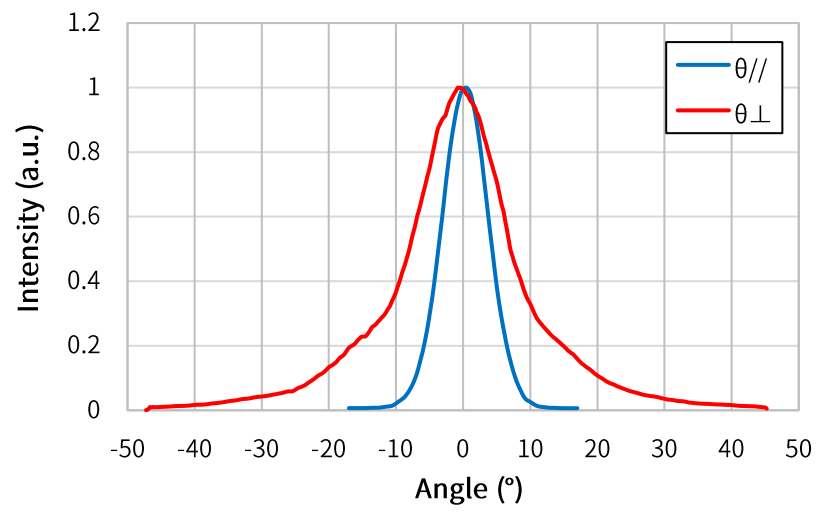
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)            |
|----------------------|---|--|
| Wavelength (Peak)    | Po=180mW                                    | 639nm                                  |
| Output [Max]         | —   | 180mW [185mW]                          |
| Threshold current    | —   | 55mA                                   |
| Operating current    | Po=180mW                                    | 215mA                                  |
| Operating voltage    | Po=180mW                                    | 2.7V                                   |
| Far Field (FWHM)     | Po=180mW                                    | $\theta_{//}$ 8°, $\theta_{\perp}$ 15° |
| Terminal connections | <a href="#">No.9</a>                        |  |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |  |

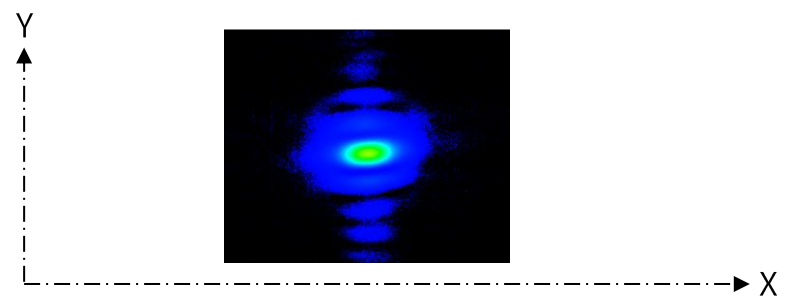
### CW I-L, I-V Temperature



### Far Field Pattern



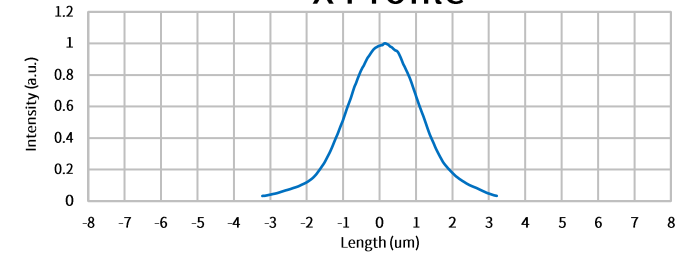
### Near Field Pattern



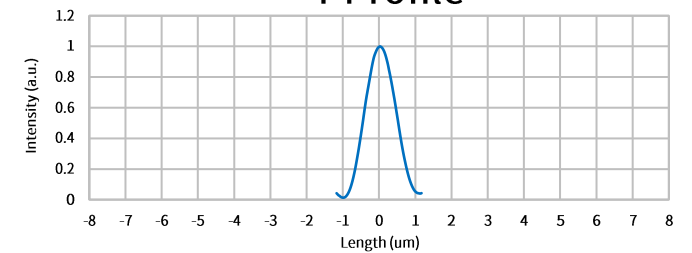
Emitter size

|   | FWHM ( $\mu$ m) | 1/e <sup>2</sup> ( $\mu$ m) |
|---|-----------------|-----------------------------|
| X | 2.3             | 4.1                         |
| Y | 1.0             | 1.6                         |

### X Profile



### Y Profile



# GH06510F4AK Single-mode Red Laser Diode

Contact

To the Wavelength

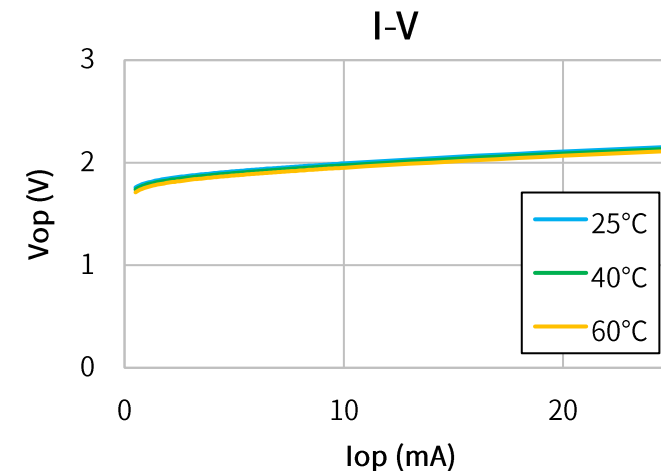
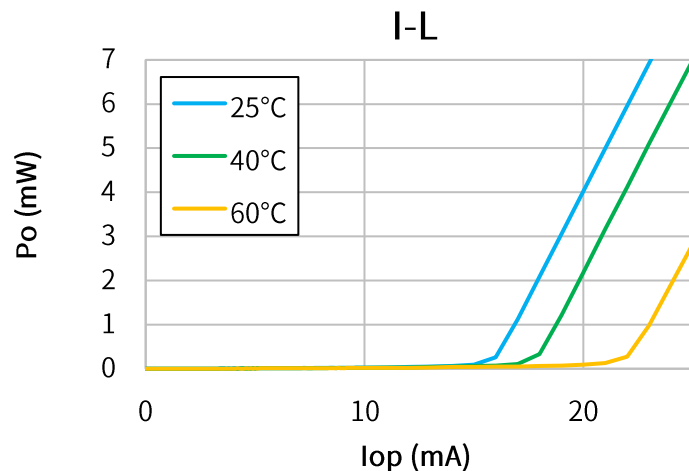
To the Package

## Characteristics

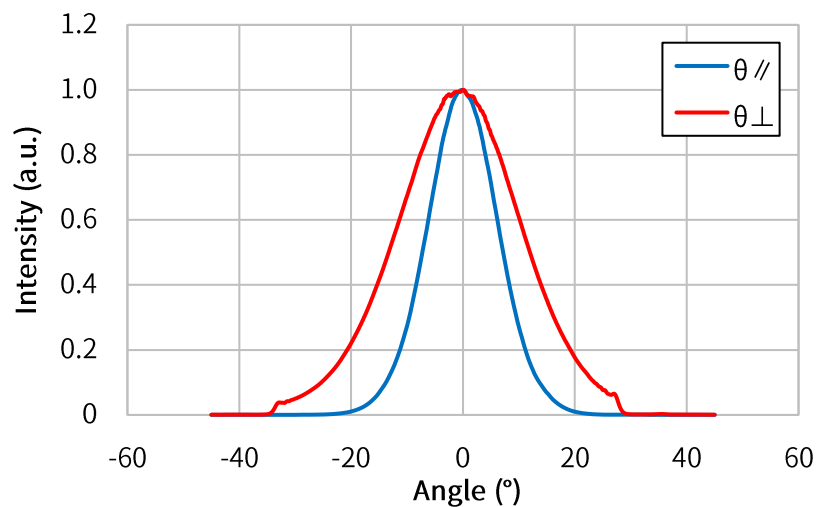
(Tc=25°C, CW)

| Item                 | Conditions                                   | Characteristic value (TYP.)                     |
|----------------------|--|---|
| Wavelength (Peak)    | Po=7mW                                       | 660nm   |
| Output [Max]         | —  | 7mW[10mW]                                       |
| Threshold current    | —  | 17mA  |
| Operating current    | Po=7mW                                       | 26mA  |
| Operating voltage    | Po=7mW                                       | 2.2V  |
| Far Field (FWHM)     | Po=7mW                                       | $\theta_{//} 13^\circ, \theta_{\perp} 28^\circ$ |
| Terminal connections | <a href="#">No.1</a>                         |   |
| Package type         | <a href="#">TO-CAN <math>\phi 3.3</math></a> |   |

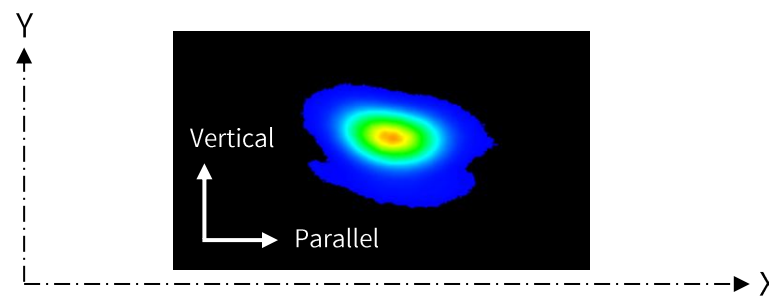
## CW I-L, I-V Temperature



## Far Field Pattern



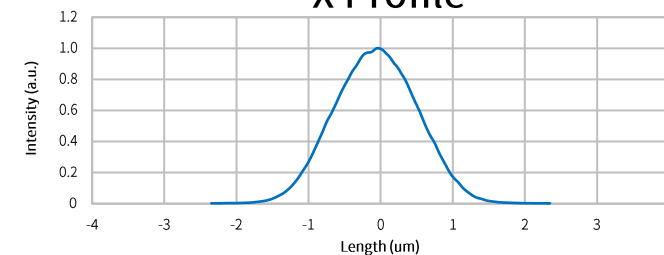
## Near Field Pattern



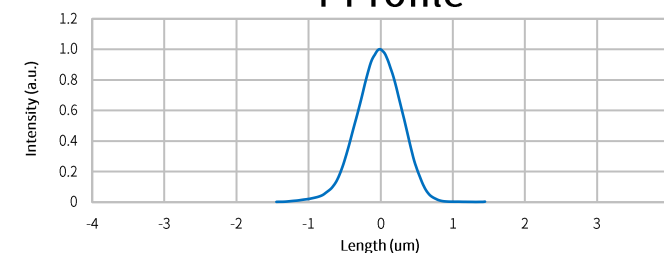
Emitter size

|   | FWHM ( $\mu\text{m}$ ) | $1/e^2$ ( $\mu\text{m}$ ) |
|---|------------------------|---------------------------|
| X | 1.4                    | 2.3                       |
| Y | 0.7                    | 1.2                       |

## X Profile



## Y Profile



# GH06610A2KC Single-mode Red Laser Diode

Contact

To the Wavelength

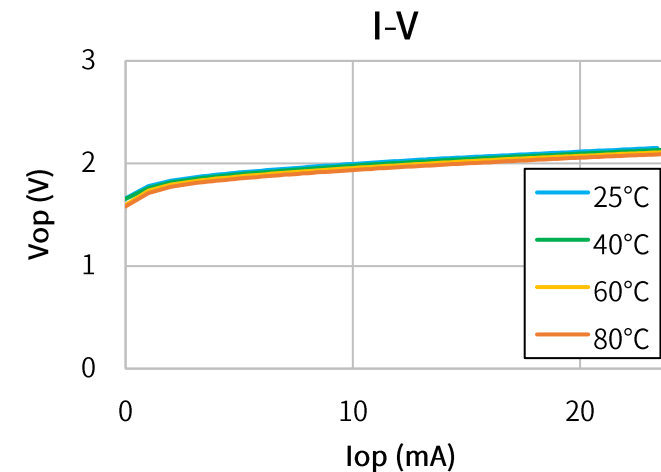
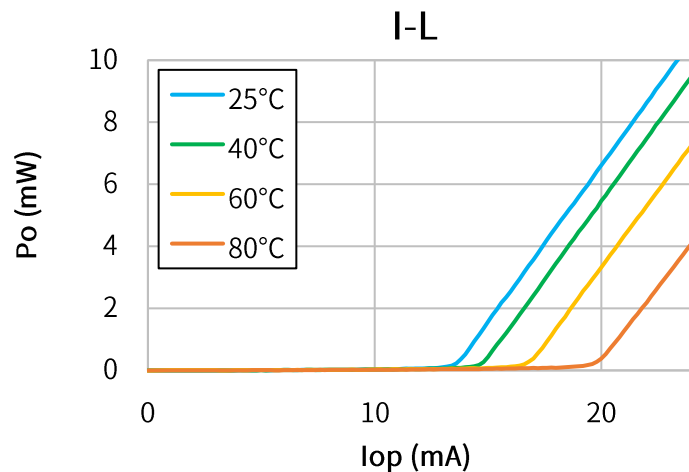
To the Package

## Characteristics

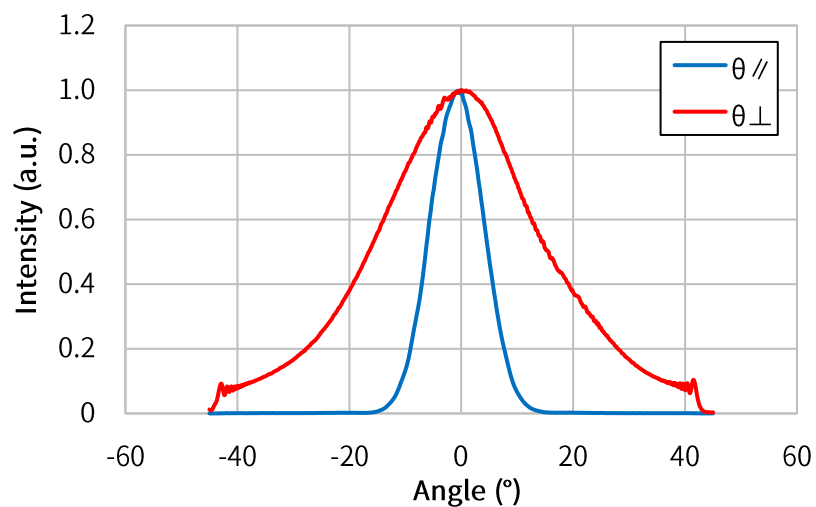
(Tc=25°C, CW)

| Item                 | Conditions                                  | Characteristic value (TYP.)             |
|----------------------|---|---|
| Wavelength (Peak)    | Po=10mW                                     | 660nm                                   |
| Output [Max]         | —   | 10mW[12mW]                              |
| Threshold current    | —   | 15mA                                    |
| Operating current    | Po=10mW                                     | 24mA                                    |
| Operating voltage    | Po=10mW                                     | 2.2V                                    |
| Far Field (FWHM)     | Po=10mW                                     | $\theta_{//}$ 12°, $\theta_{\perp}$ 33° |
| Terminal connections | <a href="#">No.4</a>                        |   |
| Package type         | <a href="#">TO-CAN <math>\phi</math>5.6</a> |   |

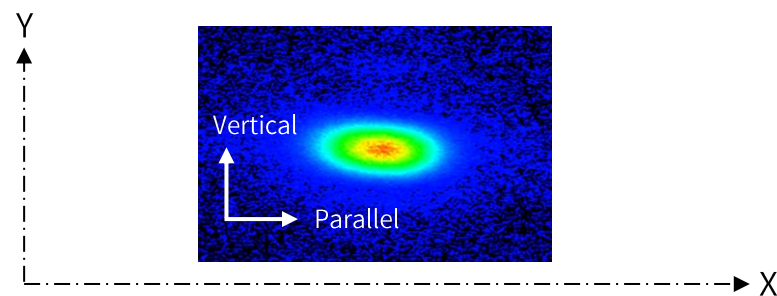
## CW I-L, I-V Temperature



## Far Field Pattern



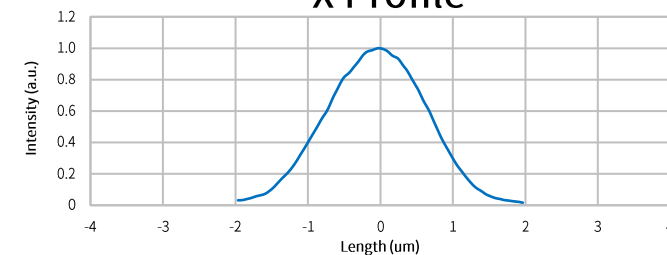
## Near Field Pattern



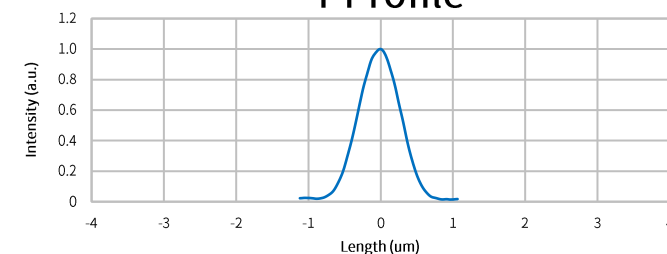
Emitter size

|   | FWHM ( $\mu$ m) | $1/e^2$ ( $\mu$ m) |
|---|-----------------|--------------------|
| X | 1.6             | 2.7                |
| Y | 0.7             | 1.1                |

## X Profile



## Y Profile



# GH06P25A2CC Single-mode Red Laser Diode

Contact

To the Wavelength

To the Package

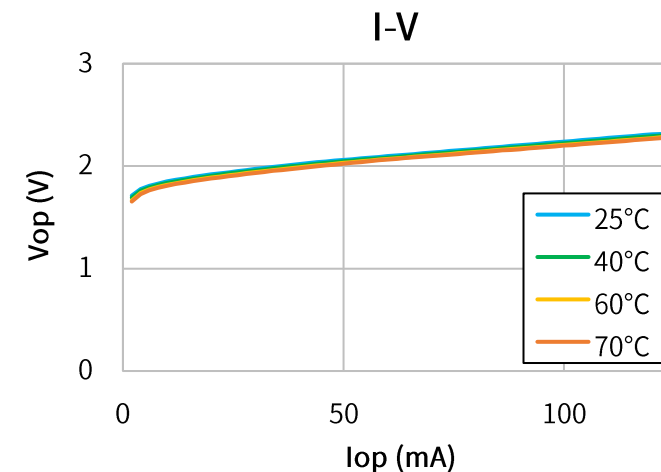
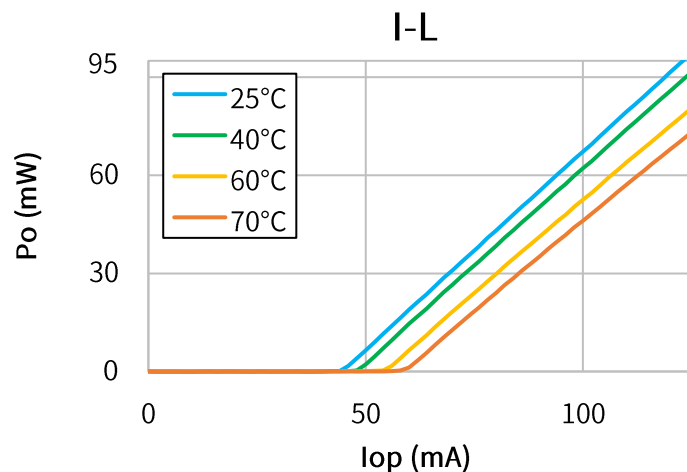
## Characteristics

(Tc=25°C, CW)

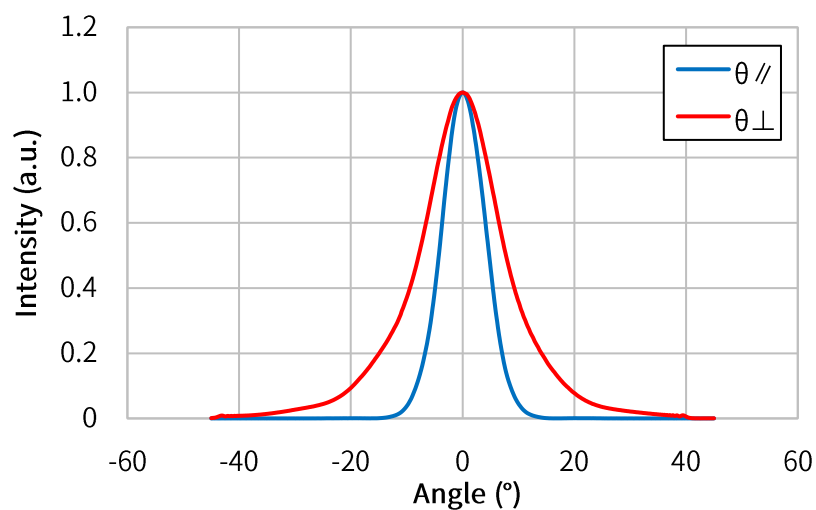
| Item              | Conditions | Characteristic value (TYP.)                       |
|-------------------|------------|---|
| Wavelength (Peak) | Po=95mW    | 660nm   |
| Output [Max]      | —          | 95mW [100mW]                                      |
| Threshold current | —          | 40mA  |
| Operating current | Po=95mW    | 122mA   |
| Operating voltage | Po=95mW    | 2.4V  |
| Far Field (FWHM)  | Po=95mW    | $\theta_{//} 10^\circ, \theta_{\perp} 15.5^\circ$ |

|                      |  |
|----------------------|--|
| Terminal connections | <a href="#">No.3</a>                         |
| Package Type         | <a href="#">TO-CAN <math>\phi 5.6</math></a> |

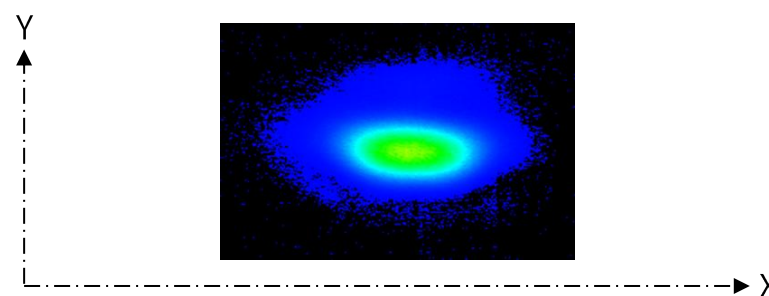
## CW I-L, I-V Temperature



## Far Field Pattern



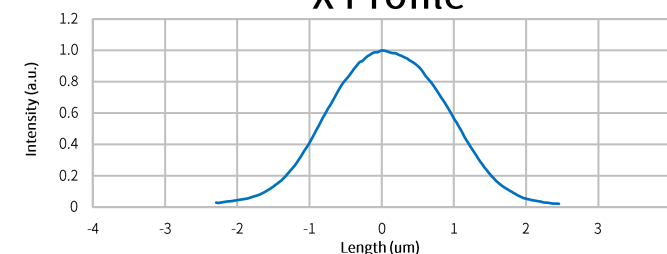
## Near Field Pattern



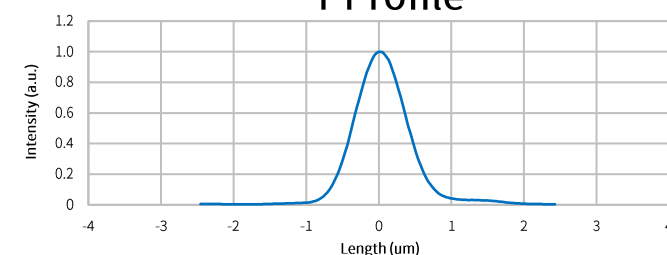
Emitter size

|   | FWHM ( $\mu\text{m}$ ) | $1/e^2$ ( $\mu\text{m}$ ) |
|---|------------------------|---------------------------|
| X | 2.0                    | 3.2                       |
| Y | 0.8                    | 1.3                       |

## X Profile



## Y Profile



# GH16P32B8C Single-mode Red Laser Diode

Contact

To the Wavelength

To the Package

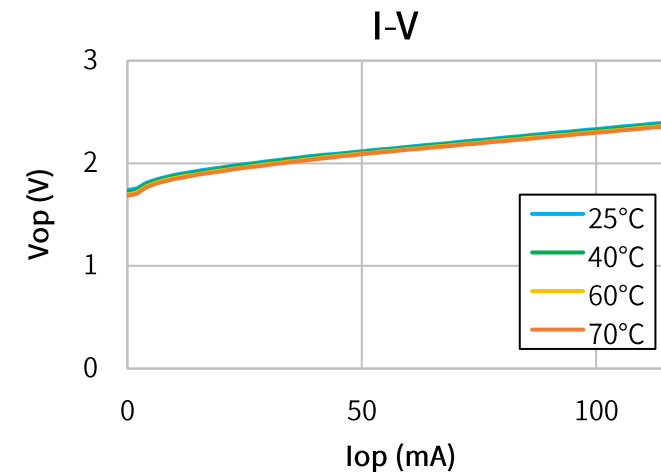
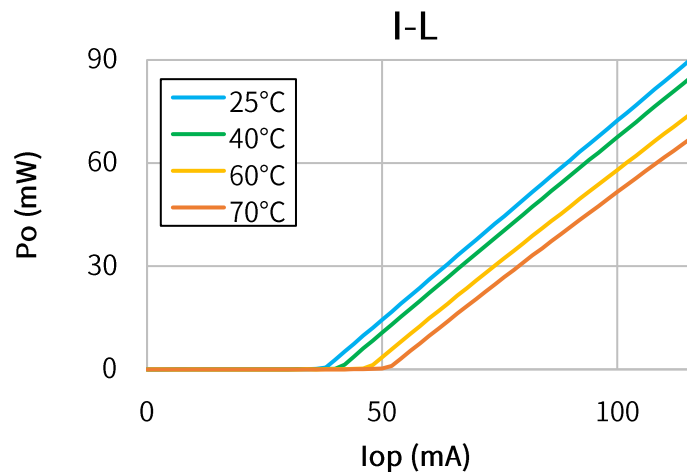
## Characteristics

(Tc=25°C, CW)

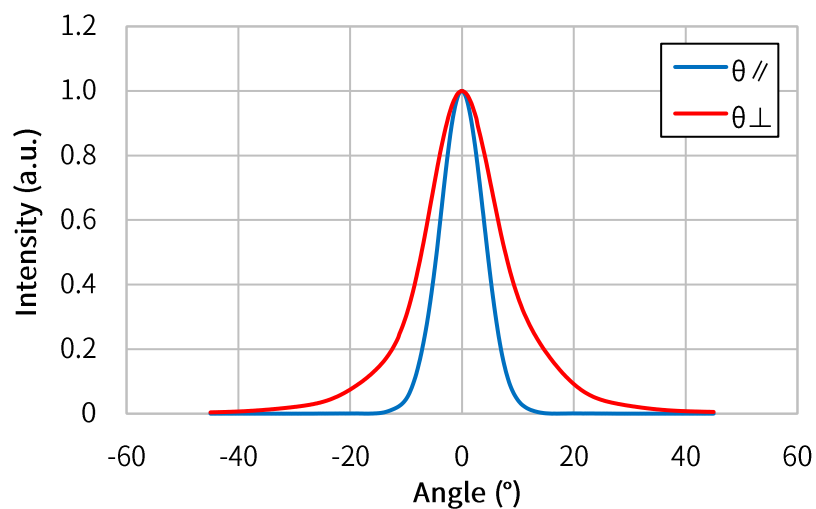
| Item              | Conditions | Characteristic value (TYP.)              |
|-------------------|------------|--|
| Wavelength (Peak) | Po=90mW    | 661nm                                    |
| Output [Max]      | —          | 90mW [100mW]                             |
| Threshold current | —          | 42mA                                     |
| Operating current | Po=90mW    | 120mA                                    |
| Operating voltage | Po=90mW    | 2.3V                                     |
| Far Field (FWHM)  | Po=90mW    | $\theta_{//}$ 9.3°, $\theta_{\perp}$ 15° |

|                      |                            |
|----------------------|----------------------------|
| Terminal connections | <a href="#">No.6</a>       |
| Package type         | <a href="#">Frame t1.8</a> |

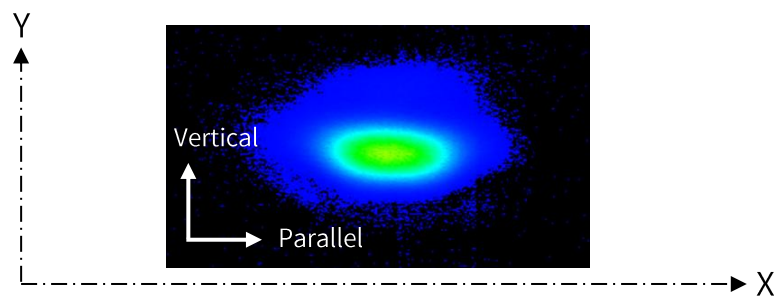
## CW I-L, I-V Temperature



## Far Field Pattern



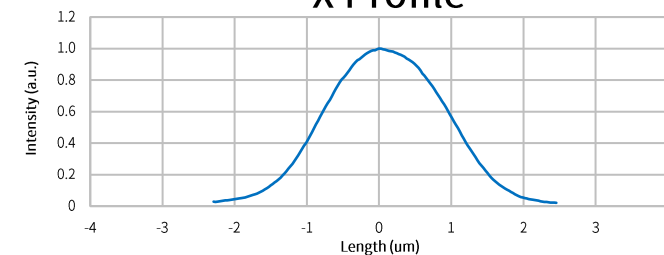
## Near Field Pattern



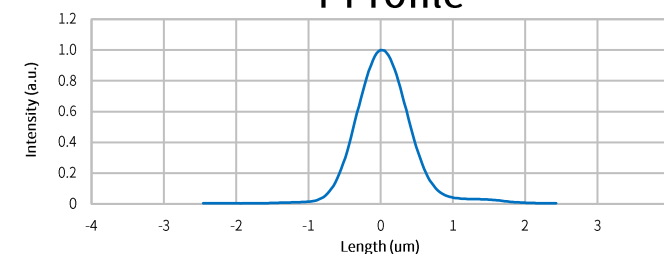
Emitter size

|   | FWHM ( $\mu\text{m}$ ) | $1/e^2$ ( $\mu\text{m}$ ) |
|---|------------------------|---------------------------|
| X | 2.0                    | 3.2                       |
| Y | 0.8                    | 1.3                       |

## X Profile



## Y Profile



# GH33235A8CN Two-wavelength Laser Diode

Contact

To the Wavelength

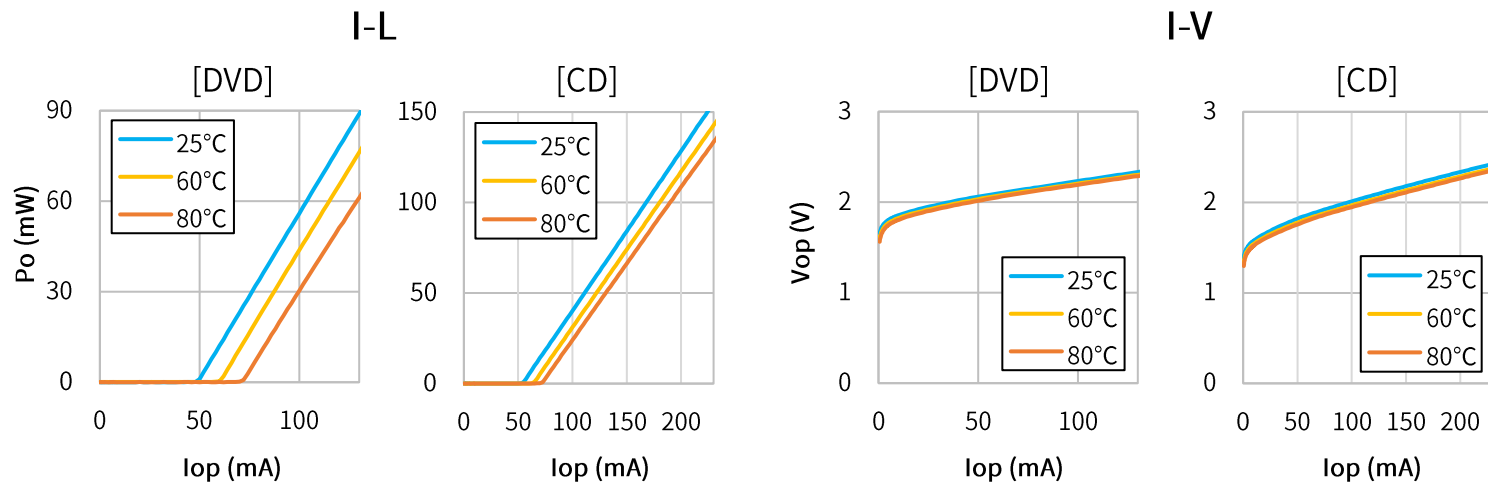
To the Package

## Characteristics

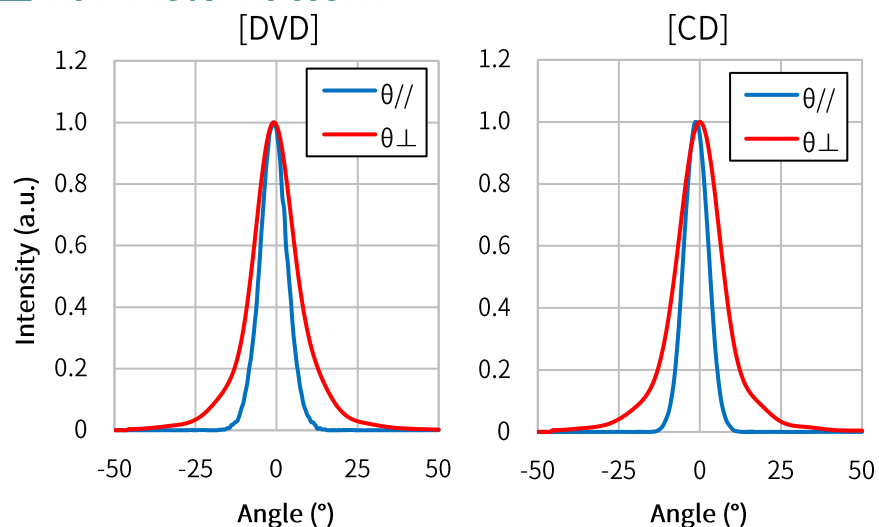
(T<sub>c</sub>=25°C, CW)

| Item                          | DVD Laser Diode            |                             | CD Laser Diode |                               |
|-------------------------------|----------------------------|-----------------------------|----------------|-------------------------------|
|                               | Conditions                 | Characteristic value (TYP.) | Conditions     | Characteristic value (TYP.)   |
| Wavelength (Peak)             | Po=90mW                    | 661nm                       | Po=150mW       | 785nm                         |
| Output [Max]                  | —                          | 90mW [90mW]                 | —              | 150mW [160mW]                 |
| Threshold current             | —                          | 50mA                        | —              | 53mA                          |
| Operating current             | Po=90mW                    | 134mA                       | Po=150mW       | 215mA                         |
| Operating voltage             | Po=90mW                    | 2.4V                        | Po=150mW       | 2.4V                          |
| Far Field (1/e <sup>2</sup> ) | Po=90mW                    | θ// 8.0-11.5<br>θ⊥ 7.0-10.5 | Po=150mW       | θ// 13.5-19.0<br>θ⊥ 13.0-18.0 |
| Terminal connections          | <a href="#">No.7</a>       |                             |                |                               |
| Package type                  | <a href="#">Frame t1.8</a> |                             |                |                               |

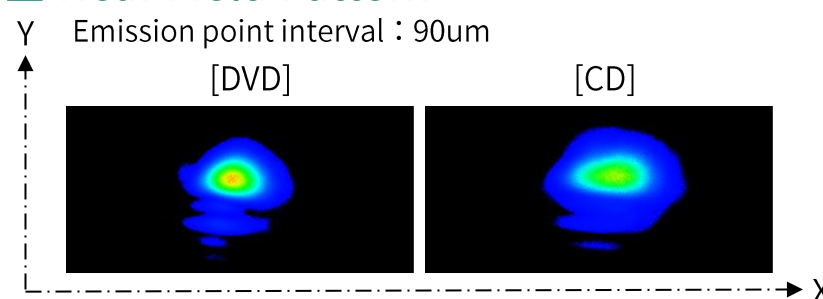
## CW I-L, I-V Temperature



## Far Field Pattern

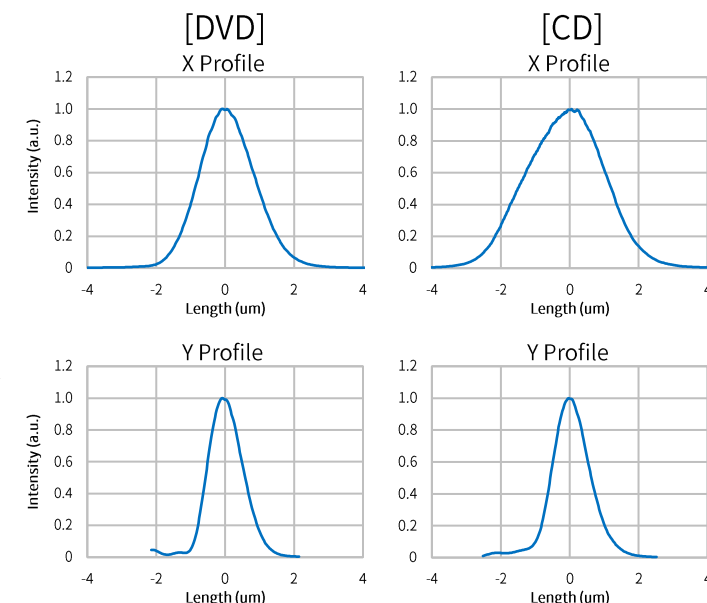


## Near Field Pattern



Emitter size

|   | FWHM (μm) |      | 1/e (μm) |      | 1/e <sup>2</sup> (μm) |      |
|---|-----------|------|----------|------|-----------------------|------|
|   | [DVD]     | [CD] | [DVD]    | [CD] | [DVD]                 | [CD] |
| X | 1.8       | 2.7  | 2.2      | 3.2  | 3.2                   | 4.4  |
| Y | 1.2       | 1.2  | 1.4      | 1.4  | 1.9                   | 2.1  |



# GH33540D8C5 Two-wavelength Laser Diode

Contact

To the Wavelength

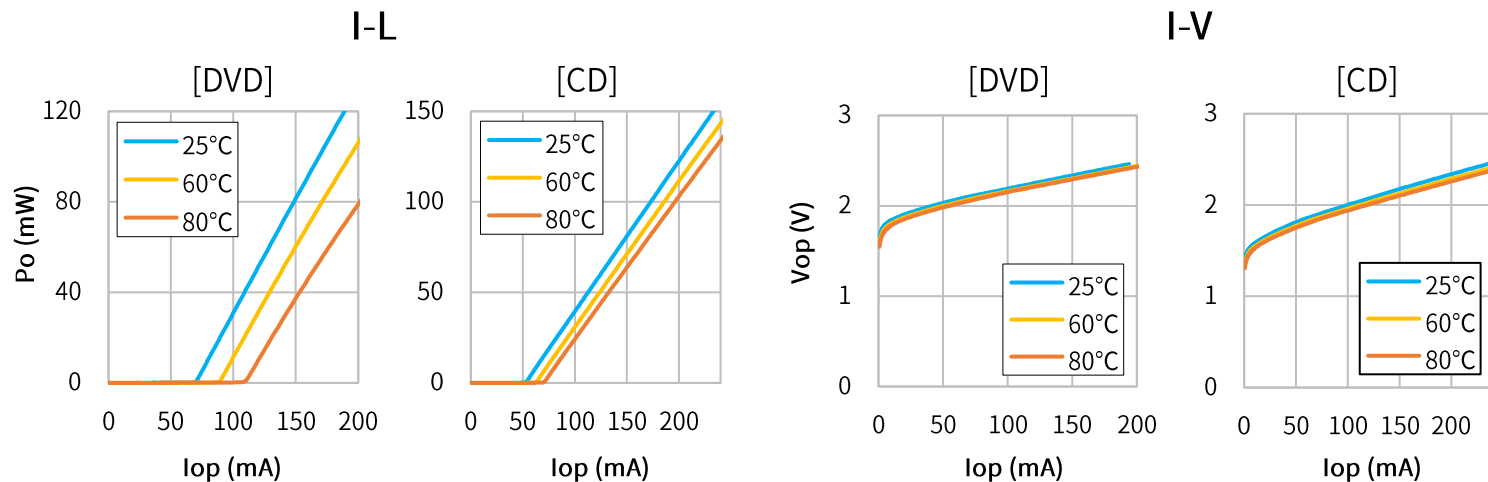
To the Package

## Characteristics

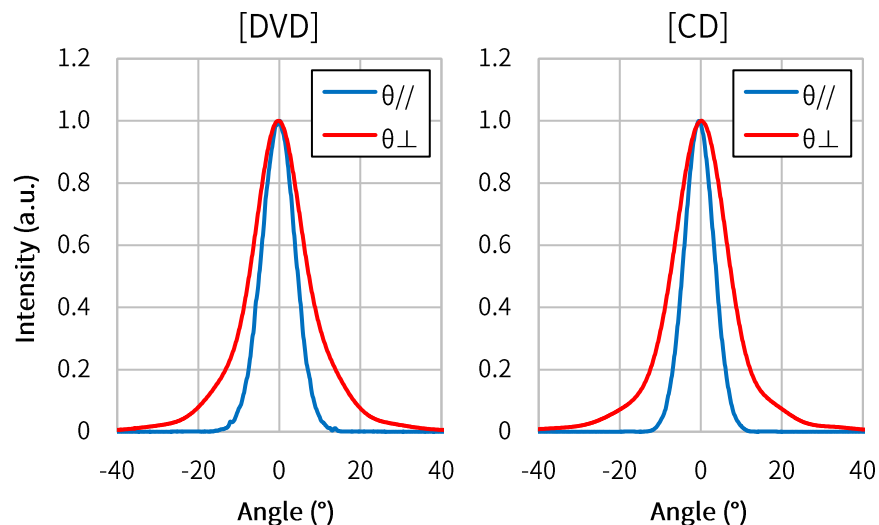
(T<sub>c</sub>=25°C, CW)

| Item                          | DVD Laser Diode            |                             | CD Laser Diode |                               |
|-------------------------------|----------------------------|-----------------------------|----------------|-------------------------------|
|                               | Conditions                 | Characteristic value (TYP.) | Conditions     | Characteristic value (TYP.)   |
| Wavelength (Peak)             | Po=120mW                   | 661nm                       | Po=150mW       | 785nm                         |
| Output [Max]                  | —                          | 120mW [125mW]               | —              | 150mW [200mW]                 |
| Threshold current             | —                          | 68mA                        | —              | 55mA                          |
| Operating current             | Po=120mW                   | 189mA                       | Po=150mW       | 230mA                         |
| Operating voltage             | Po=120mW                   | 2.5V                        | Po=150mW       | 2.4V                          |
| Far Field (1/e <sup>2</sup> ) | Po=120mW                   | θ// 8.5-11.5<br>θ⊥ 7.0-10.5 | Po=150mW       | θ// 14.0-19.0<br>θ⊥ 13.0-18.0 |
| Terminal connections          | <a href="#">No.7</a>       |                             |                |                               |
| Package type                  | <a href="#">Frame t1.8</a> |                             |                |                               |

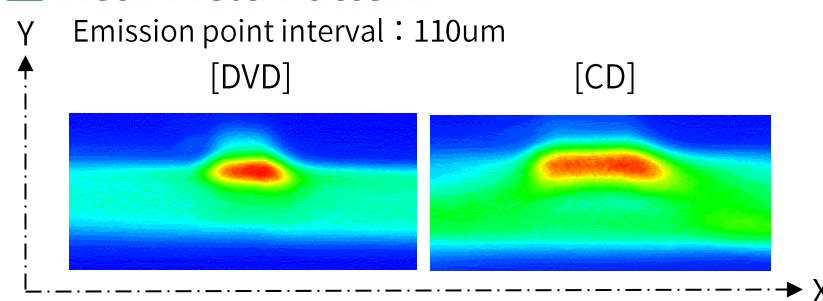
## CW I-L, I-V Temperature



## Far Field Pattern

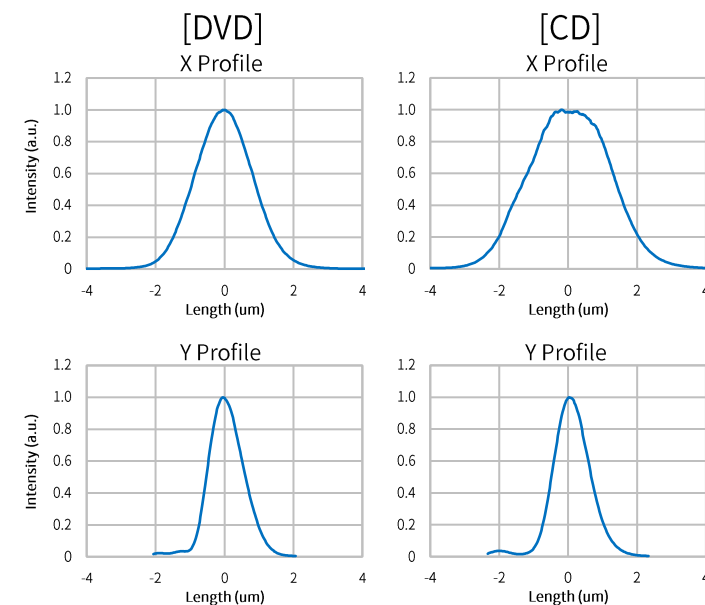


## Near Field Pattern



Emitter size

|   | FWHM (μm) |      | 1/e (μm) |      | 1/e <sup>2</sup> (μm) |      |
|---|-----------|------|----------|------|-----------------------|------|
|   | [DVD]     | [CD] | [DVD]    | [CD] | [DVD]                 | [CD] |
| X | 2.0       | 2.9  | 2.4      | 3.4  | 3.4                   | 4.5  |
| Y | 1.3       | 1.2  | 1.5      | 1.4  | 2.1                   | 2.0  |



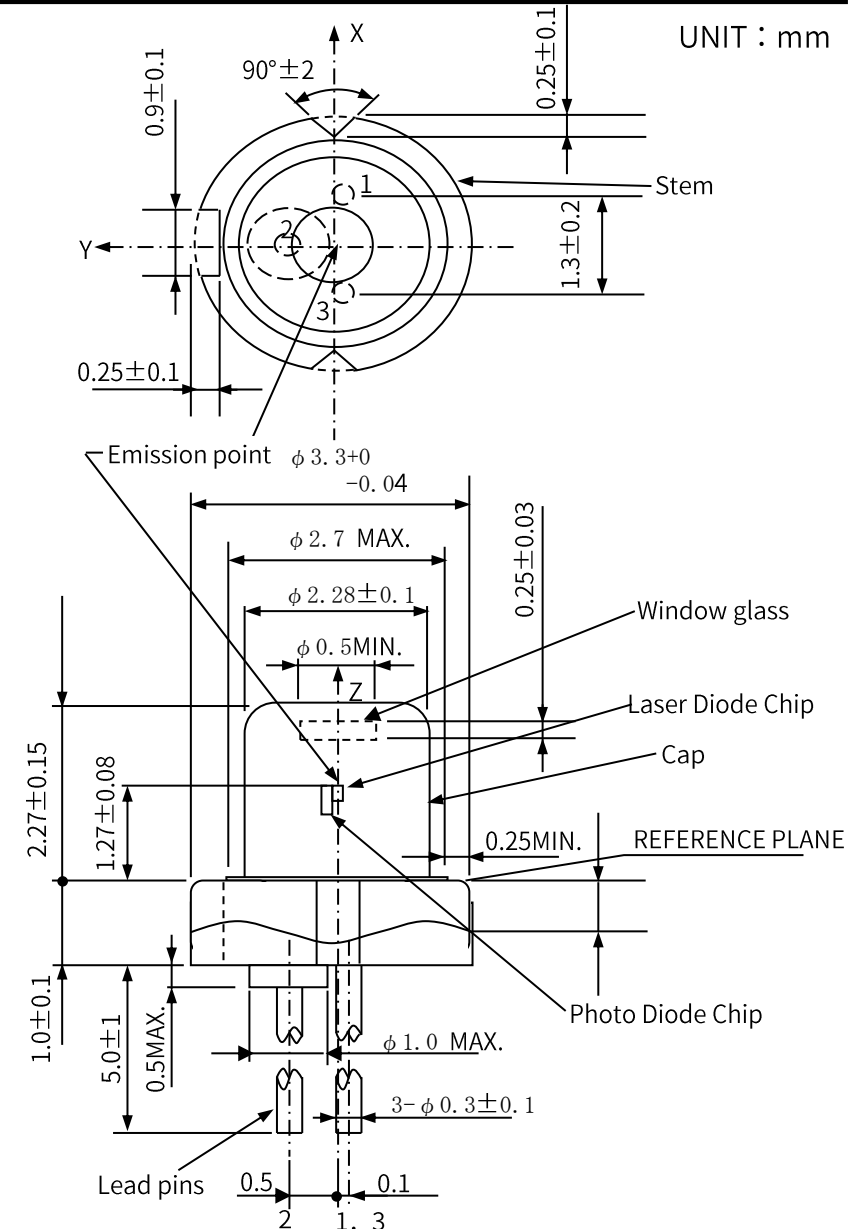
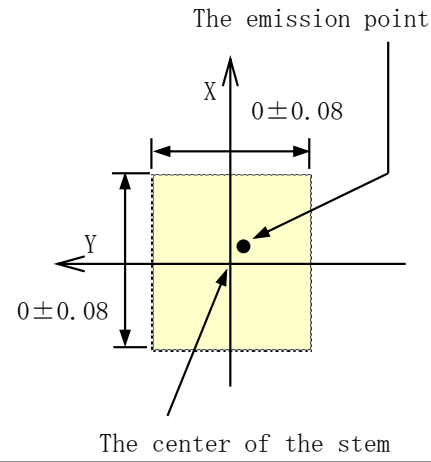
# Outline Dimensions $\phi 3.3\text{mm}$

Package

$\phi 3.3$  TO-CAN



Enlarged drawing  
around the emission point



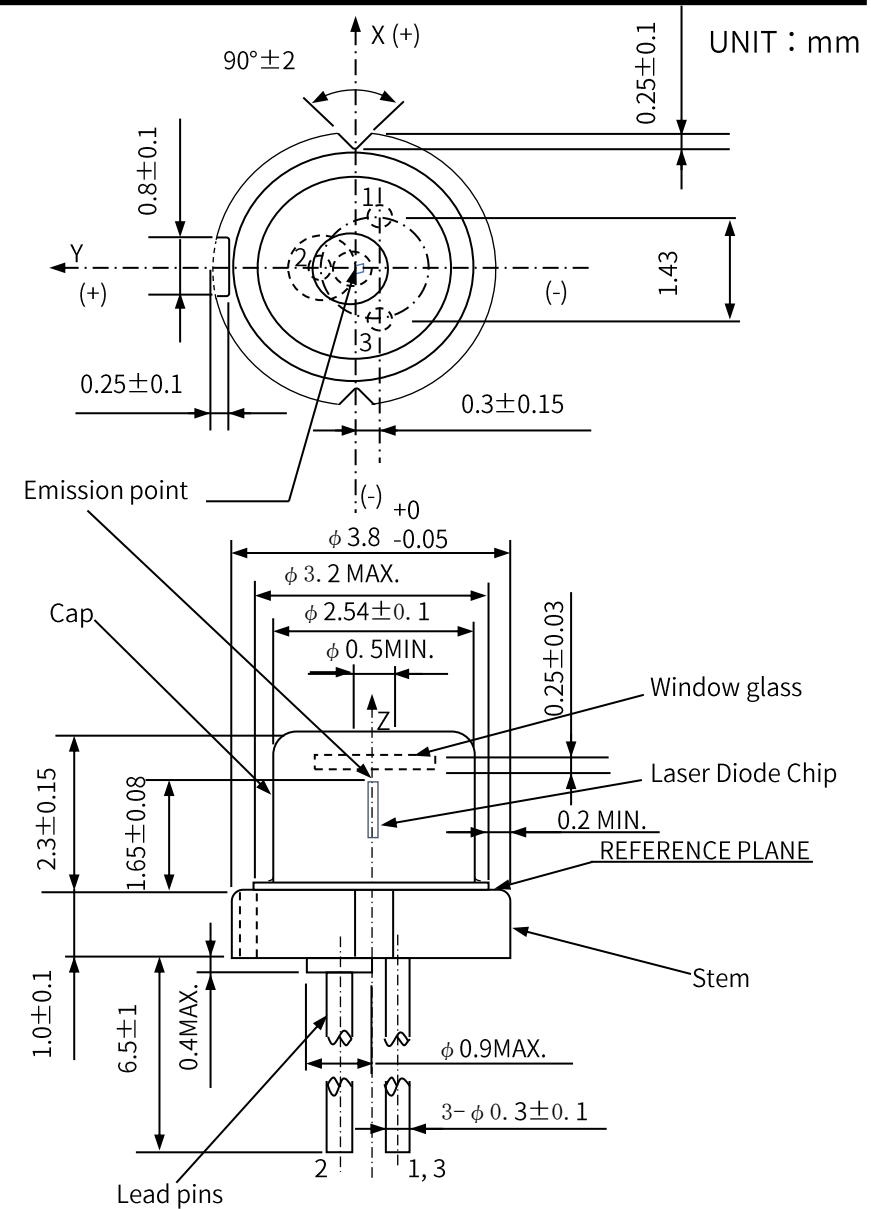
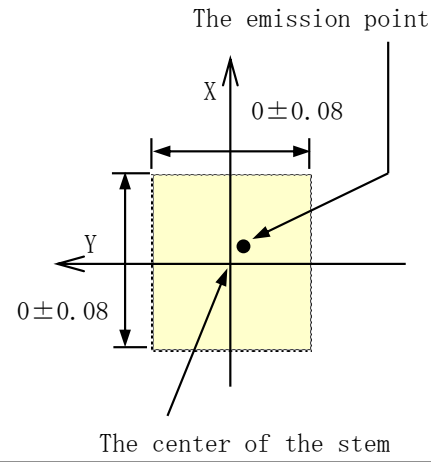
# Outline Dimensions $\phi 3.8\text{mm}$

Package

$\phi 3.8$  TO-CAN



Enlarged drawing  
around the emission point



# Outline Dimensions $\phi 3.8\text{mm}$

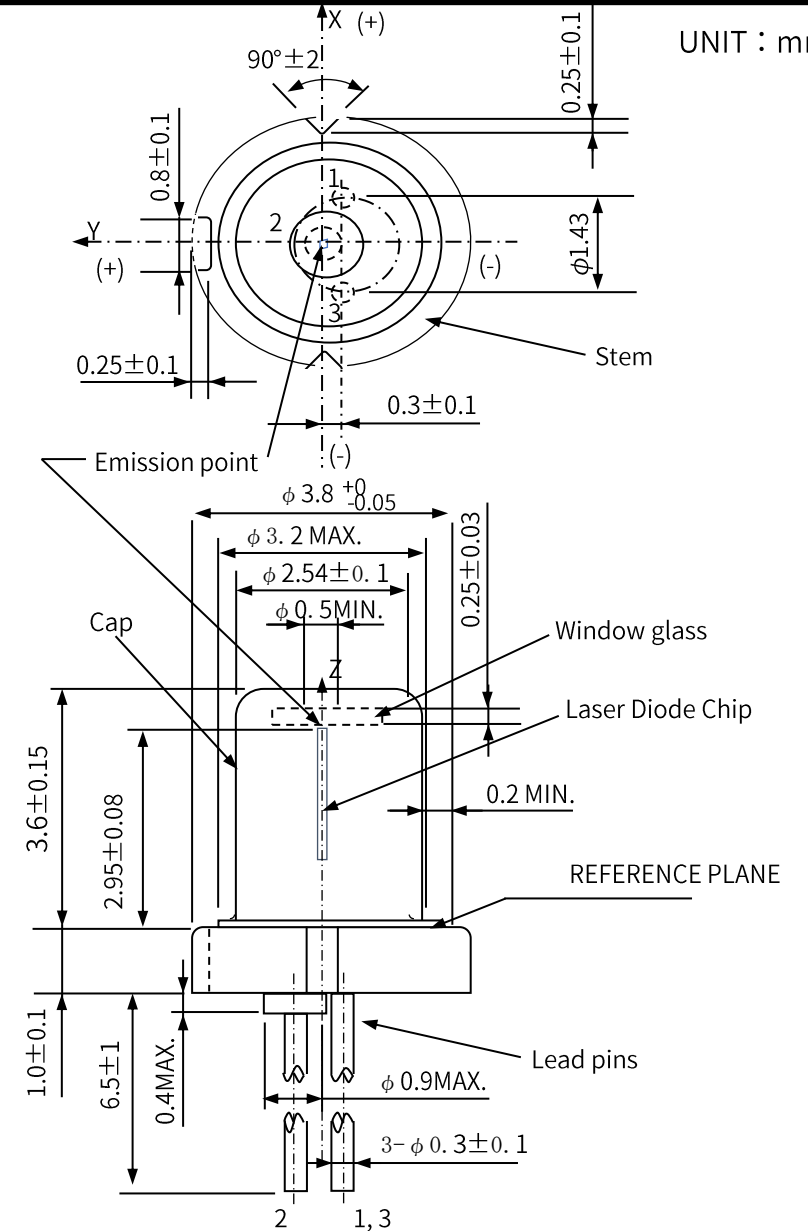
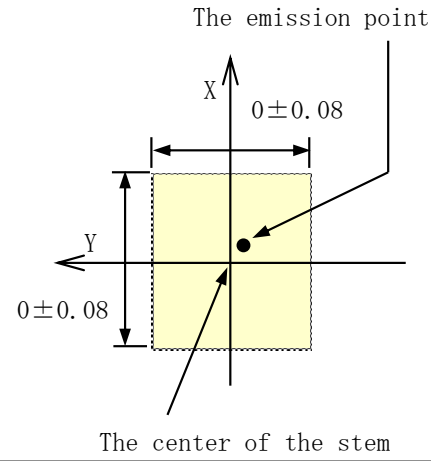
Package

$\phi 3.8$  TO-CAN  
High Cap Model



This specification is only applied to GH0631IA5G.

Enlarged drawing  
around the emission point



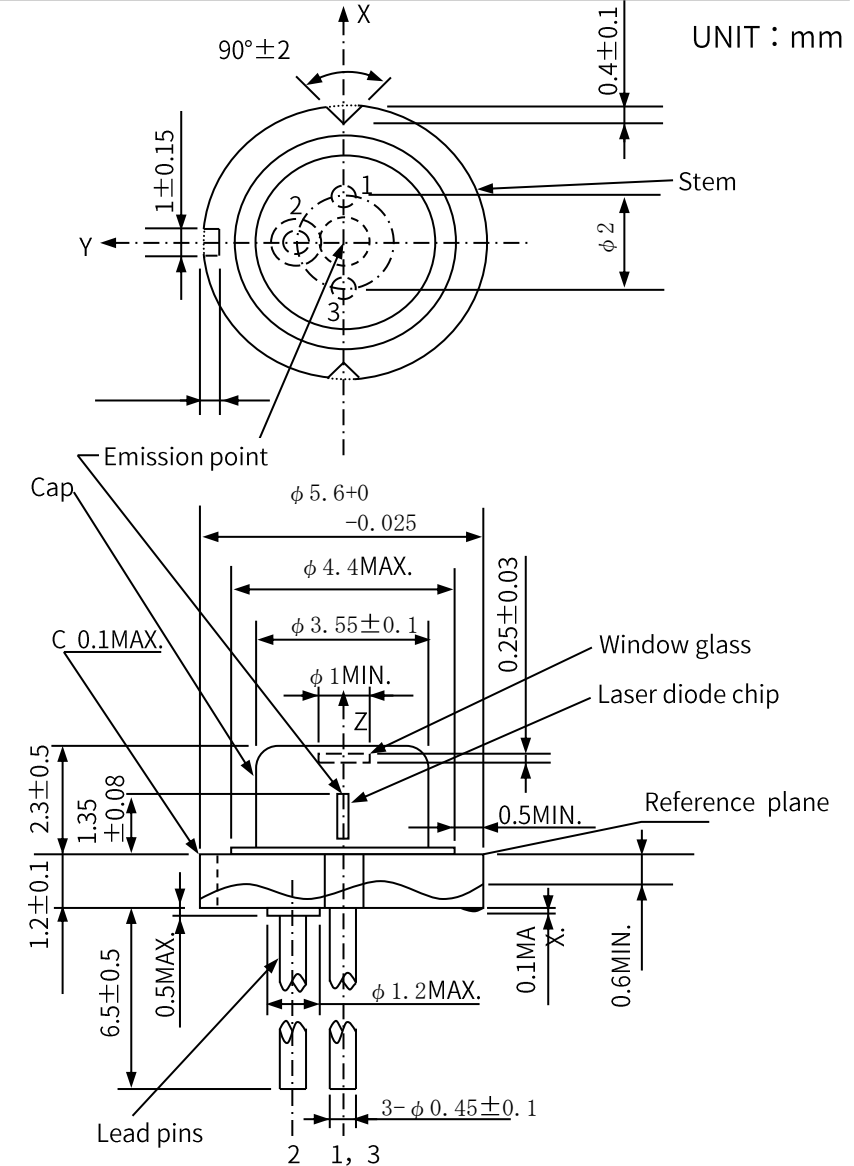
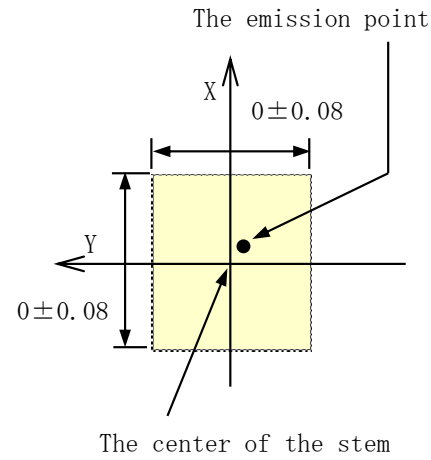
# Outline Dimensions $\phi 5.6\text{mm}$

Package

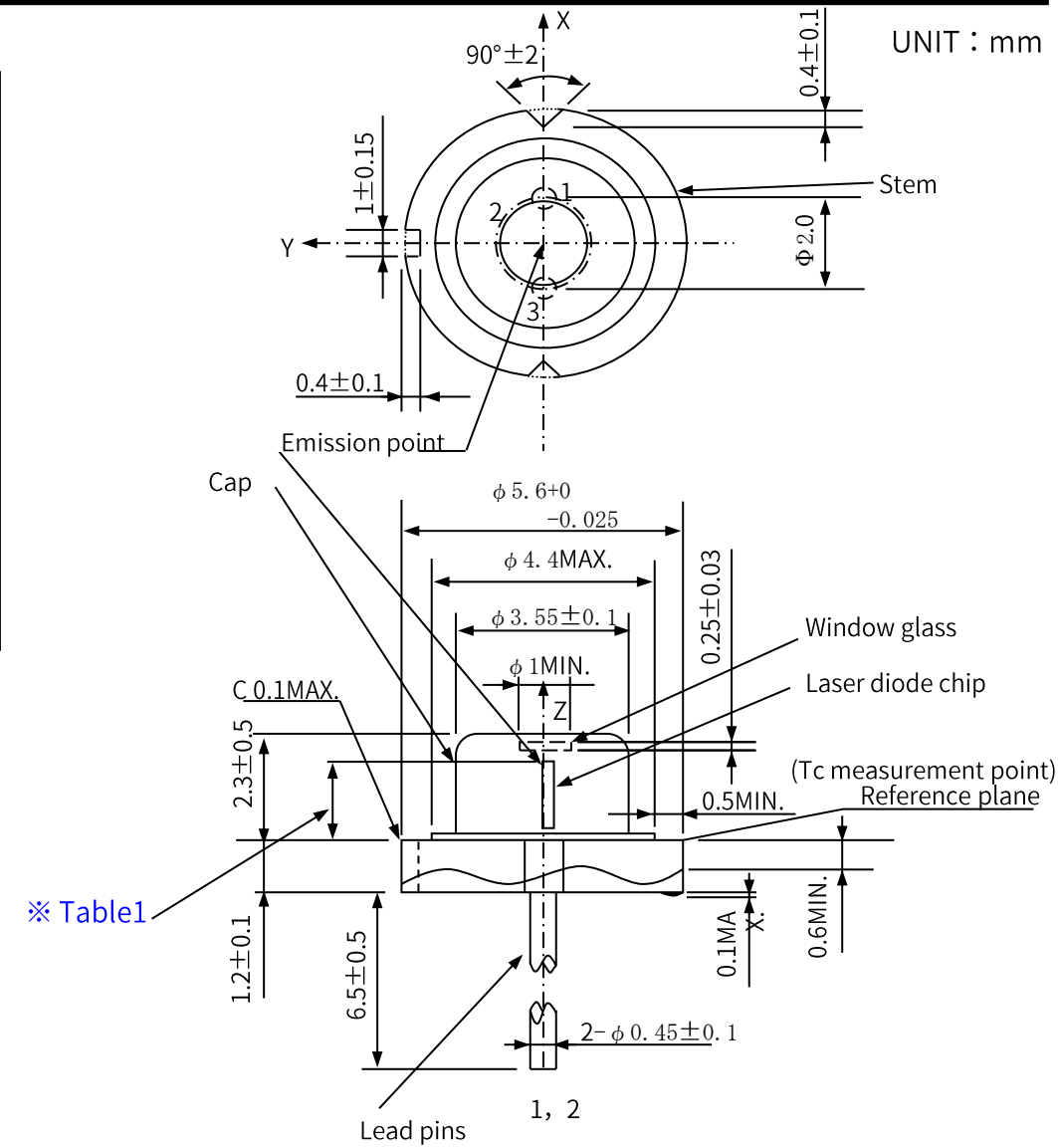
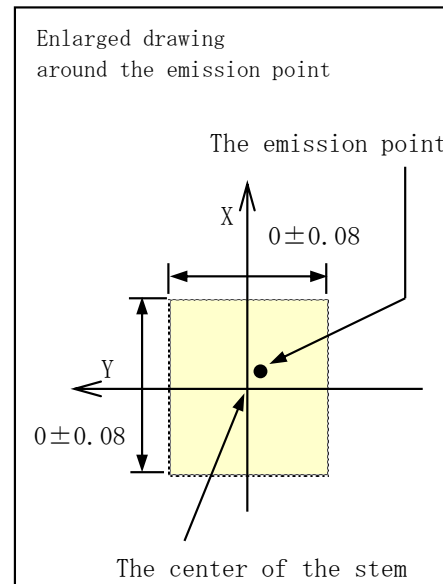
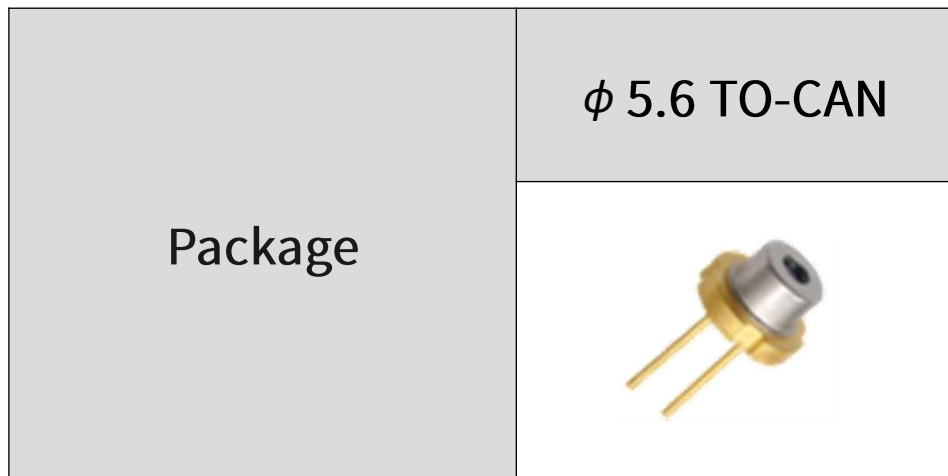
$\phi 5.6$  TO-CAN



Enlarged drawing  
around the emission point




# Outline Dimensions $\phi 5.6\text{mm}$

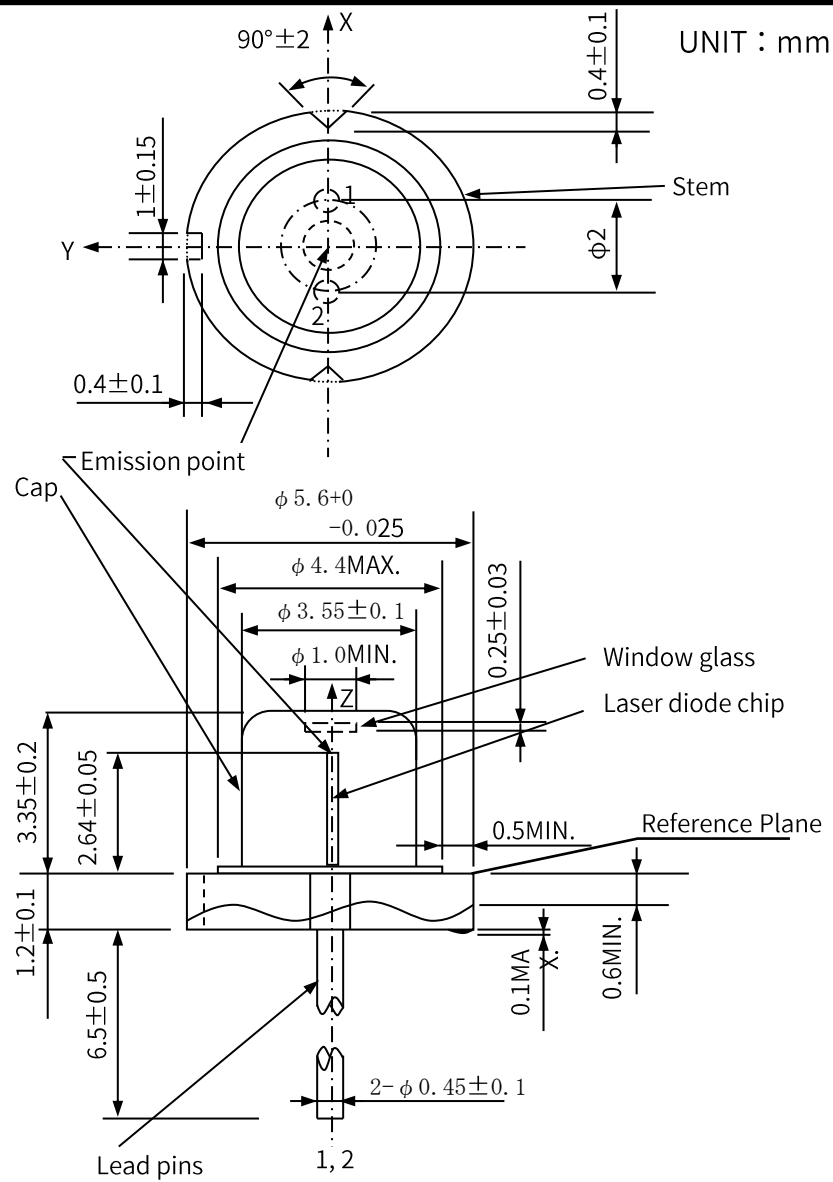
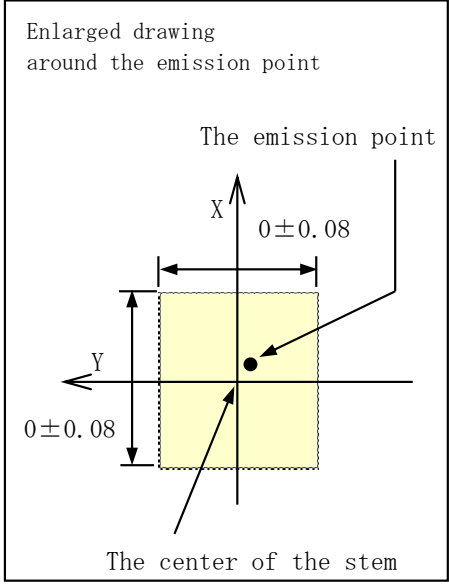


※Table 1 Light emitting point height by model UNIT:mm

| Model number |      | Height of the light emitting point |
|--------------|------|------------------------------------|
| GH0382AA2G   | UV   | 1.50 ±0.08                         |
| GH0393AA2G   | UV   | 1.35 ±0.08                         |
| GH04W10A2GC  | UV   | 1.35 ±0.08                         |
| GH0406AA2G   | UV   | 1.35 ±0.08                         |
| GH04V01A2GC  | UV   | 1.35 ±0.08                         |
| GH04I01A2G   | Blue | 1.50 ±0.08                         |
| GH04C01B2G   | Blue | 1.50 ±0.08                         |
| GH04550A2G   | Blue | 1.35 ±0.08                         |
| GH0637AA2G   | Red  | 1.65 ±0.08                         |

# Outline Dimensions $\phi 5.6\text{mm}$

|                |   |
|----------------|---|
| <p>Package</p> | <p><math>\phi 5.6</math> TO-CAN<br/>High Cap Model</p>                            |
|                |  |



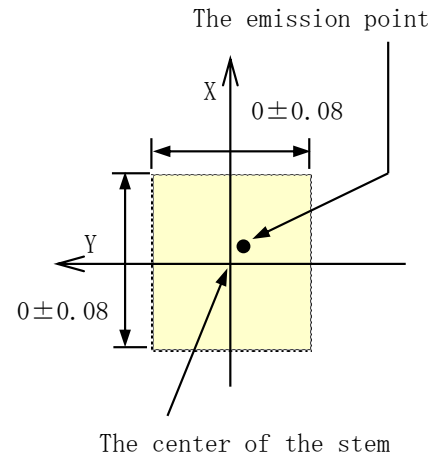
# Outline Dimensions $\phi 9.0\text{mm}$

Package

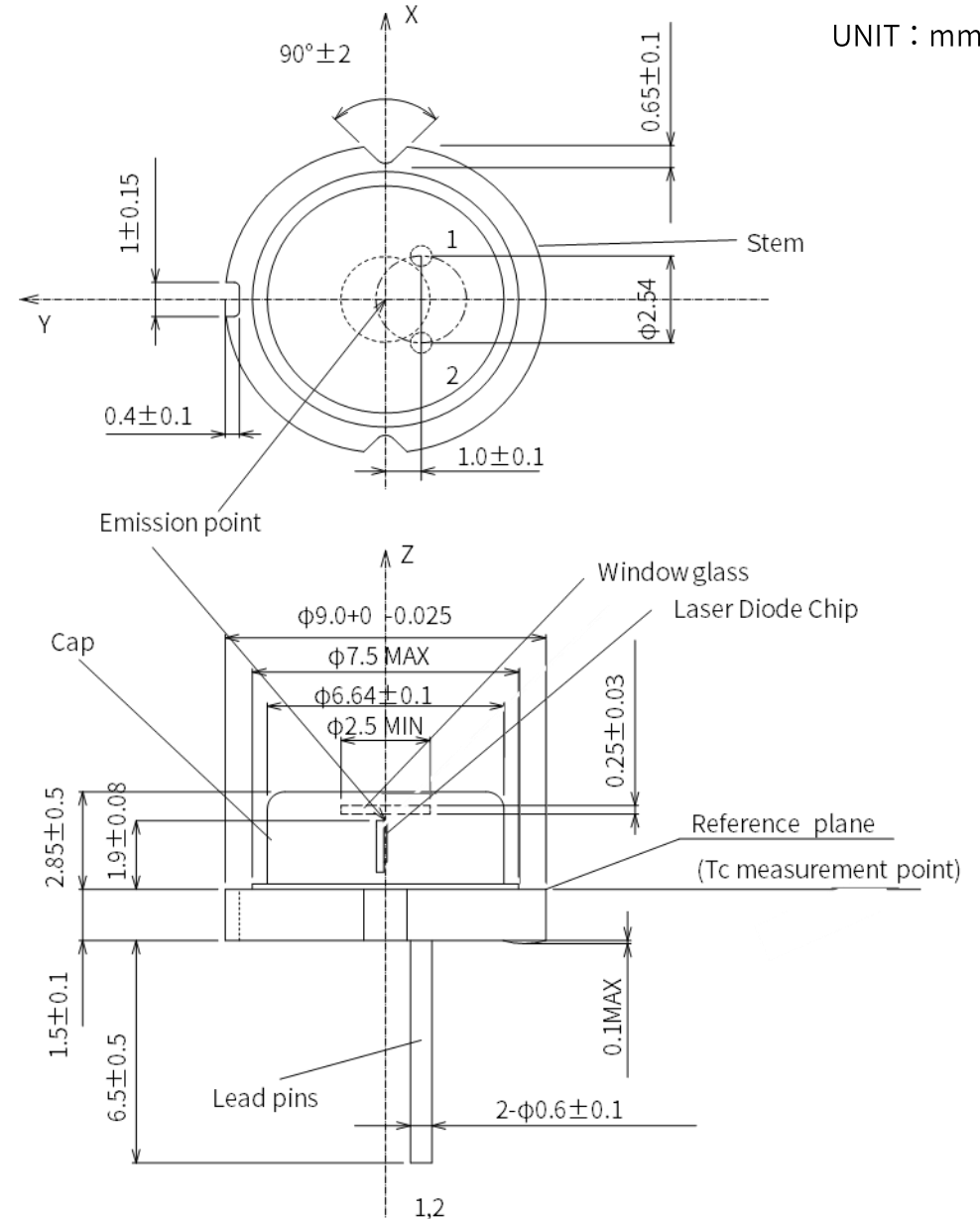
$\phi 9.0$  TO-CAN



Enlarged drawing  
around the emission point



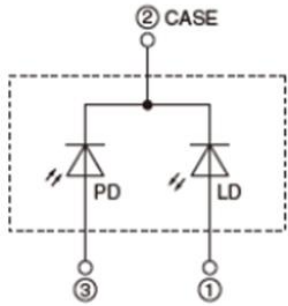
UNIT : mm



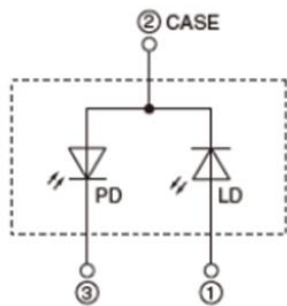


# Terminal connections

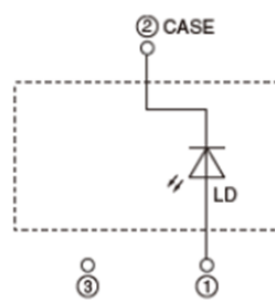
No.1



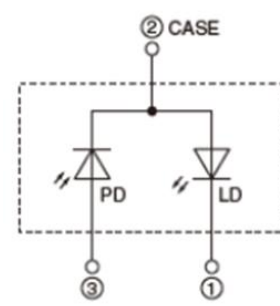
No.2



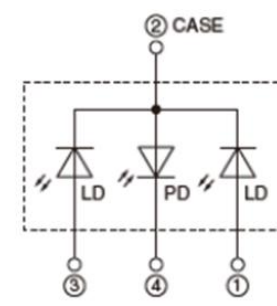
No.3



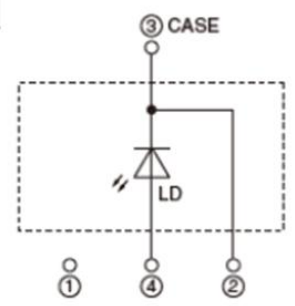
No.4



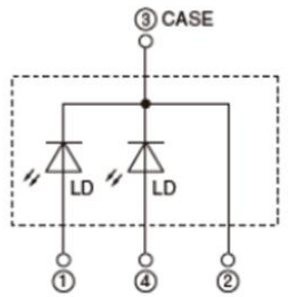
No.5



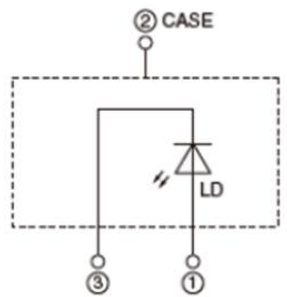
No.6



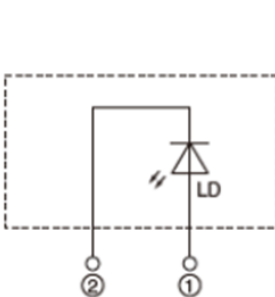
No.7



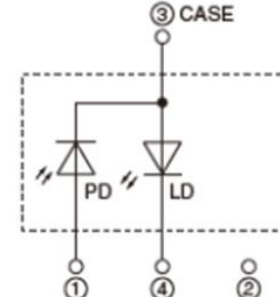
No.8



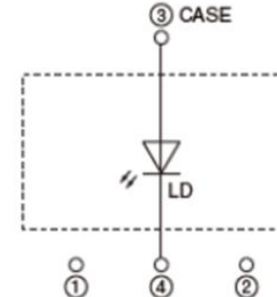
No.9



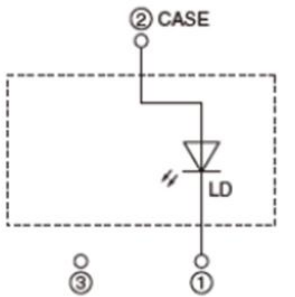
No.10



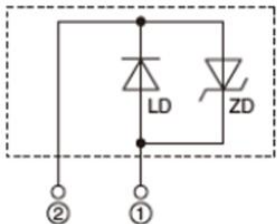
No.11



No.12



No.13





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