

Single Emitter Diode Laser (CW) F-mount [®] - FM01 Series



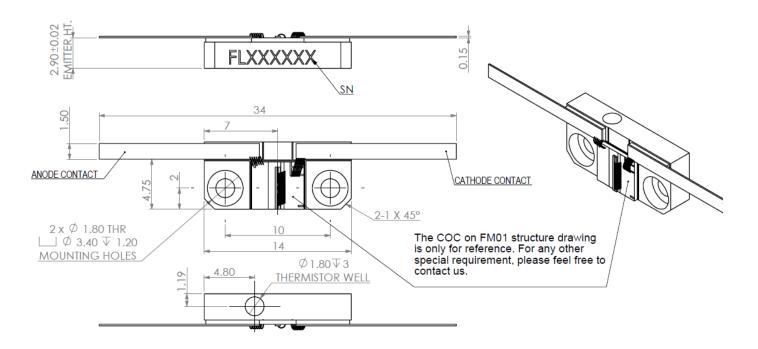
Features

- AuSn bonding
- Harsh environment use

Applications

- Pumping
- Medical
- Industry
- Display
- Scientific research

Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

All rights reserved. Product specifications and descriptions are subject to change. Product delivered with limited warranty. Please contact our sales representatives for complete details.
Address: 56 Zhangba 6th Road, High-Tech Zone, 710077 Xi'an, Shaanxi, P. R. China
Focuslight Technologies Inc.
Tel: +86 29 8188 9945 | Email: sales@focuslight.com | Website: https://www.focuslight.com



Product Specifications

| Product Code | | OPD000018 | OPD000032 | OPD000036 | OPD000038 |
|---|-----------|------------------|------------------|------------------|------------------|
| Part No. ¹ | | FL-FM01-10-808 | FL-FM01-12-915 | FL-FM01-12-940 | FL-FM01-12-976 |
| Optical Data ² | Unit | Value | | | |
| Centroid Wavelength | nm | 808 | 915 | 940 | 976 |
| Wavelength Tolerance | nm | ± 3 | ± 10 | ± 5 | ± 5 |
| Emitter Width | μm | 200 | 100 | 100 | 100 |
| Output Power ³ | W | 10 | 12 | 12 | 12 |
| Spectral Width FWHM | nm | ≤ 3 | ≤ 4.2 | ≤ 4.5 | ≤ 4.5 |
| Spectral Width 90% Energy | nm | ≤ 5 | ≤ 6 | ≤ 6.5 | ≤ 7 |
| Fast Axis Divergence (FWHM) | ٥ | ~ 30 | ~ 30 | ~ 30 | ~ 30 |
| Slow Axis Divergence (FWHM) | ٥ | 8 | 8 | 8 | 8 |
| Polarization Mode | - | TE | TE | TE | TE |
| Wavelength Temp. Coefficient | nm / °C | ~ 0.28 | ~ 0.32 | ~ 0.33 | ~ 0.34 |
| Electrical Data ² | | | | | |
| Operation Current | А | ≤ 11.8 | ≤ 13.8 | ≤ 13.8 | ≤ 13.8 |
| Threshold Current | А | ≤ 1.8 | ≤ 0.8 | ≤ 0.9 | ≤ 0.8 |
| Operating Voltage | V | ≤ 2.2 | ≤ 2 | ≤ 2 | ≤ 2 |
| Slope Efficiency | W / A | ≥ 0.9 | ≥ 0.95 | ≥ 0.95 | ≥ 0.95 |
| Power Conversion Efficiency | % | ≥ 44 | ≥ 52 | ≥ 52 | ≥ 50 |
| Thermal Data | | | | | |
| Operating Temperature | °C | 15 ~ 30 | 15 ~ 30 | 15 ~ 30 | 15 ~ 30 |
| Storage Temperature ⁴ | °C | -40 ~ 55 | -40 ~ 55 | -40 ~ 55 | -40 ~ 55 |
| Recommended Heatsink Capacity | W | ≥ 20 | ≥ 24 | ≥ 24 | ≥ 24 |
| Product Code | | OPD000026 | OPD000034 | OPD000079 | OPD000039 |
| Part No. ¹ | | FL-FM01-10-808-Y | FL-FM01-12-915-Y | FL-FM01-12-940-Y | FL-FM01-12-976-Y |
| Optical Data ² | Unit | Value | | | |
| Fast Axis Divergence (FWHM) All other specifications same as abo | ° ove. | ~ 8 | ~ 8 | ~ 8 | ~ 8 |

¹Part No. = Brand Code - Series - Power - Centroid Wavelength (- Collimation).

²Data at 25°C temperature, unless otherwise stated.

³Lifetime reduced if overused under nominal operating condition.

⁴A non-condensing environment is required for storage and operation below ambient dew point.



Rev 06 | Updated January 26, 2024