

# Single Emitter Diode Laser (CW)

## FM01



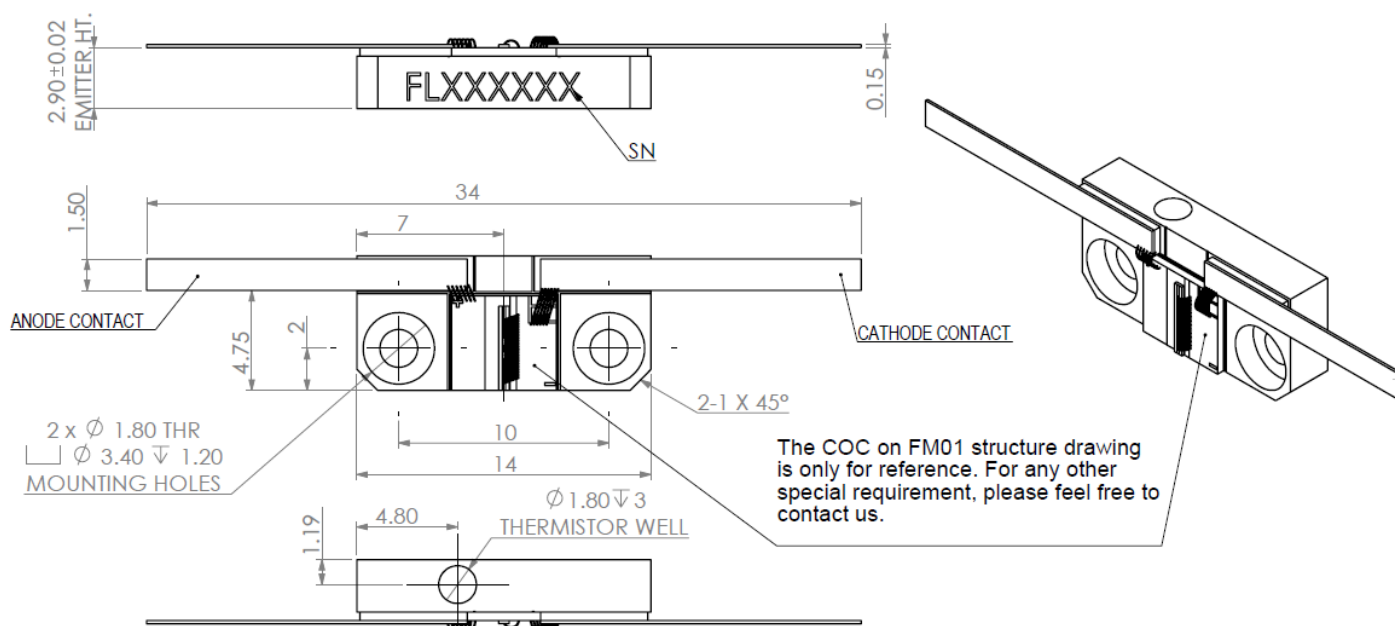
### Features

- 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.

## Product Specifications

Product Code	OPD000018	OPD000031	OPD000036	OPD000038
Part No. <sup>1</sup>	FL-FM01-10-808	FL-FM01-12-915	FL-FM01-12-940	FL-FM01-12-976

Optical Data <sup>2</sup>	Unit	Value			
Centroid Wavelength	nm	808	915	940	976
Wavelength Tolerance	nm	± 3	± 5	± 5	± 5
Emitter Width	µm	200	100	100	100
Output Power <sup>3</sup>	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)	°	~ 30	~ 30	~ 30	~ 30
Slow Axis Divergence (FWHM)	°	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 <sup>2</sup>					
Operation Current	A	≤ 11.8	≤ 13.8	≤ 13.8	≤ 13.8
Threshold Current	A	≤ 1.8	≤ 0.5	≤ 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 <sup>4</sup>	°C	-40 ~ 55	-40 ~ 55	-40 ~ 55	-40 ~ 55
Recommended Heatsink Capacity	W	≥ 20	≥ 24	≥ 24	≥ 24

Product Code	OPD000021	OPD000033	OPD000079	OPD000039
Part No. <sup>1</sup>	FL-FM01-10-808-Y	FL-FM01-12-915-Y	FL-FM01-12-940-Y	FL-FM01-12-976-Y

Optical Data <sup>2</sup>	Unit	Value			
Fast Axis Divergence (FWHM)	°	~ 8	~ 8	~ 8	~ 8

All other specifications same as above.

<sup>1</sup> Part No. = Brand Code - Series - Power - Centroid Wavelength (- Collimation).

<sup>2</sup> Data at 25°C temperature, unless otherwise stated.

<sup>3</sup> Lifetime reduced if overused under nominal operating condition.

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

