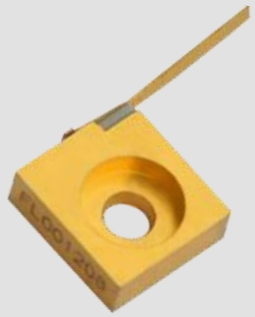
C-mount Single Emitter Diode Laser (CW)



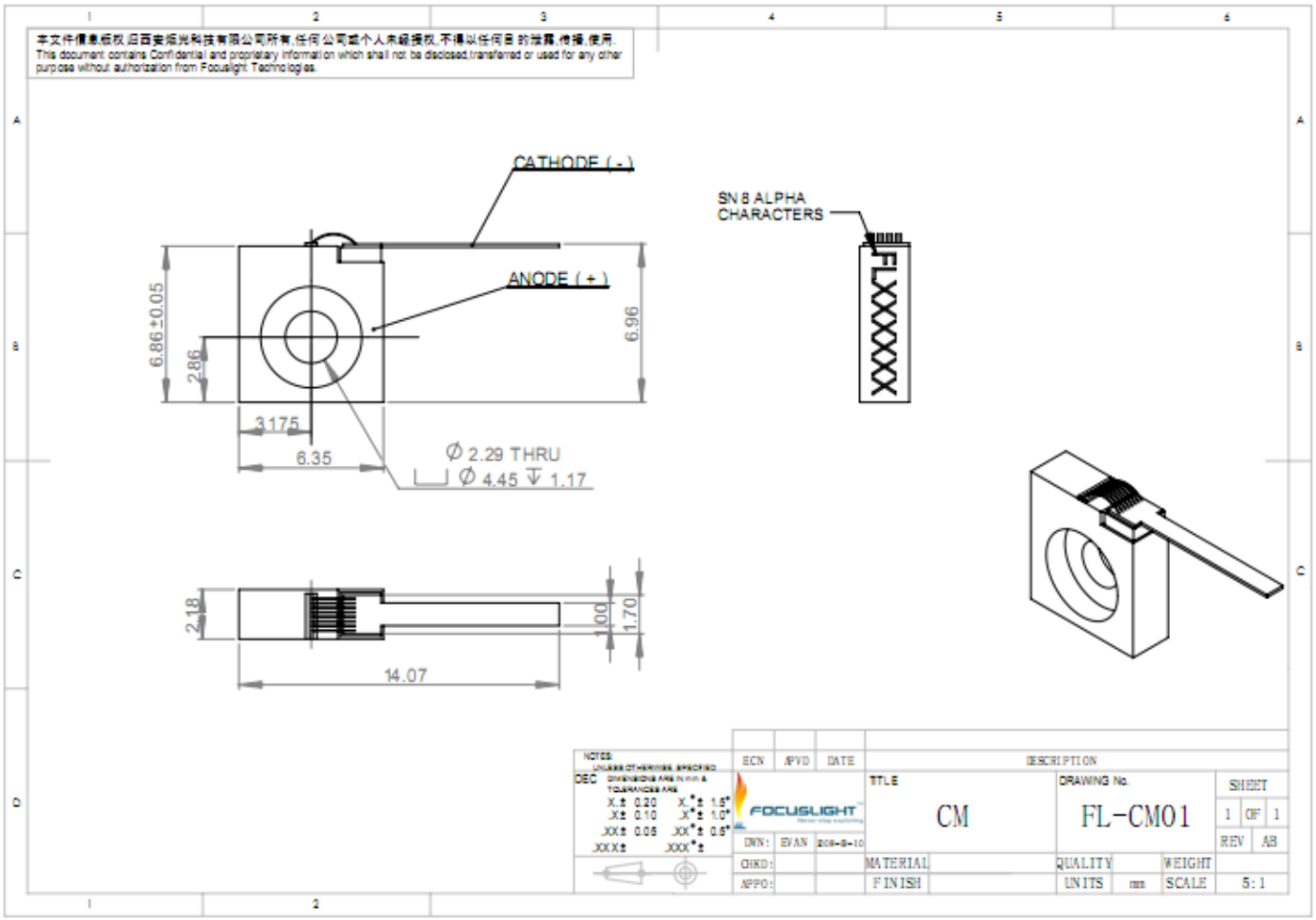
Features

- High reliability
- High Stability
- AuSn bonding(CM01)
- Harsh environmental applications

Applications

- Display
- Industry
- Scientific research
- Pumping
- Medical

Device Dimension (mm)



This structure drawing is only for reference. More structure drawings can be found below the datasheet.

For any other special requirement, please feel free to contact us.

C-mount Single Emitter Diode Laser (CW)

Specification

Module Type [1]	Units	FL-CM01-0.35-635	FL-CM02/CM03-0.35-635	FL-CM01/CM02/CM03-0.5-635	FL-CM01-3-792	FL-CM01-2-808
Optical [3,6]						
Center Wavelength λ	nm	635	635	635	792	808
Wavelength Tolerance	nm	±5	±5	±5	±5	±3
Output Power[2]	W	0.35	0.35	0.5	3	2
Spectral Width FWHM	nm	⩽1	⩽1	⩽1	⩽2	⩽2
Spectral Width FW90%E	nm	⩽3	⩽3	⩽3	⩽4	⩽3
Fast Axis Divergence(FWHM) [4]	degree	40	40	40	35	35
Slow Axis Divergence (FWHM)	degree	5	5	5	8	8
Polarization Mode	-	TE	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/℃	～0.25	～0.25	～0.25	~0.27	~0.28
Electrical Parameters [3,6]						
Operating Current I_{op}	A	⩽0.85	⩽0.85	⩽1.4	⩽3.4	⩽2.6
Threshold Current I_{th}	A	⩽0.5	⩽0.5	⩽0.85	⩽0.8	⩽0.7
Operating Voltage V_{op}	V	⩽2.2	⩽2.2	⩽2.2	⩽2	⩽2
Slope Efficiency	W/A	⩾0.9	⩾0.9	⩾0.85	⩾1.1	⩾1.1
Power Conversion Efficiency	%	⩾20	⩾20	⩾18	⩾52	⩾45
Thermal Parameters						
Operating Temperature	℃	15~20	15~20	15~20	15~30	15~30
Storage Temperature [5]	℃	0~55	0~55	0~55	0~55	0~55
Recommended Heatsink Capacity	W	⩾1	⩾1	⩾2	⩾5	⩾3

[1]Explanation for the name of Module Type：FL(abbreviation of Focuslight) -CM01(structure code) -2(output power) -808(center wavelength).

[2]Reduced lifetime if used above nominal operating conditions.

[3]Data at 25℃ temperature, unless otherwise stated.

[4]For fast axis collimation: divergence <5°.

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

[6]If there are any other requirements, please contact us.

C-mount Single Emitter Diode Laser (CW)

Specification

Module Type [1]	Units	FL-CM02/CM03-2-808	FL-CM01/CM02/CM03-2.5-808	FL-CM01/CM02/CM03-3-808	FL-CM01-5-808	FL-CM02/CM03-5-808
Optical [3,6]						
Center Wavelength λ	nm	808	808	808	808	808
Wavelength Tolerance	nm	±3	±3	±3	±3	±3
Output Power[2]	W	2	2.5	3	5	5
Spectral Width FWHM	nm	⩽2	⩽2.5	⩽2	⩽3	⩽3
Spectral Width FW90%E	nm	⩽3	⩽3.5	⩽3	⩽4	⩽4
Fast Axis Divergence(FWHM) [4]	degree	35	35	35	35	35
Slow Axis Divergence (FWHM)	degree	8	8	8	8	8
Polarization Mode	-	TE	TE	TE/TM	TE/TM	TM
Wavelength Temp. Coefficient	nm/℃	~0.28	~0.28	~0.28	~0.28	~0.28
Electrical Parameters [3,6]						
Operating Current I_{op}	A	⩽2.3	⩽2.6	⩽3.5	⩽5.6	⩽5.4
Threshold Current I_{th}	A	⩽0.7	⩽0.5	⩽0.8	⩽1	⩽1
Operating Voltage V_{op}	V	⩽2	⩽2	⩽2	⩽2	⩽2
Slope Efficiency	W/A	⩾1.15	⩾1.1	⩾1.1	⩾1.05	⩾1.05
Power Conversion Efficiency	%	⩾50	⩾55	⩾48	⩾46	⩾46
Thermal Parameters						
Operating Temperature	℃	15~30	15~30	15~30	15~30	15~30
Storage Temperature [5]	℃	0~55	0~55	0~55	0~55	0~55
Recommended Heatsink Capacity	W	⩾3	⩾5	⩾6	⩾10	⩾10

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C-mount Single Emitter Diode Laser (CW)

Specification

Module Type [1]	Units	FL-CM01-3-825	FL-CM01-3-880	FL-CM01-3.5-915	FL-CM01-5-915	FL-CM01-3.5-940	FL-CM01-5-940
Optical [3,6]							
Center Wavelength λ	nm	825	880	915	915	940	940
Wavelength Tolerance	nm	±3	±3	±5	±3	±5	±5
Output Power[2]	W	3	3	3.5	5	3.5	5
Spectral Width FWHM	nm	⩽2	⩽3	⩽4	⩽4	⩽4	⩽4
Spectral Width FW90%E	nm	⩽4	⩽4	⩽6	⩽6	⩽6	⩽6
Fast Axis Divergence(FWHM) [4]	degree	35	35	35	35	35	35
Slow Axis Divergence (FWHM)	degree	8	8	8	8	8	8
Polarization Mode	-	TM	TE	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/℃	～0.28	～0.3	～0.32	～0.32	~0.33	~0.33
Electrical Parameters [3,6]							
Operating Current I_{op}	A	⩽3.6	⩽3.3	⩽3.8	⩽5.2	⩽3.8	⩽5.2
Threshold Current I_{th}	A	⩽0.85	⩽0.7	⩽0.5	⩽0.8	⩽0.5	⩽0.8
Operating Voltage V_{op}	V	⩽2	⩽1.8	⩽2	⩽2	⩽2	⩽2
Slope Efficiency	W/A	⩾1.05	⩾1.1	⩾1.05	⩾1	⩾1.1	⩾1
Power Conversion Efficiency	%	⩾44	⩾55	⩾52	⩾52	⩾52	⩾52
Thermal Parameters							
Operating Temperature	℃	15~30	15~30	15~30	15~30	15~30	15~30
Storage Temperature [5]	℃	0~55	0~55	0~55	0~55	0~55	0~55
Recommended Heatsink Capacity	W	⩾6	⩾6	⩾7	⩾10	⩾7	⩾10

[1]Explanation for the name of Module Type：FL(abbreviation of Focuslight) -CM01(structure code) -2(output power) -808(center wavelength).

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C-mount Single Emitter Diode Laser (CW)

Specification

Module Type [1]	Units	FL-CM01-3-976	FL-CM01-3.5-976	FL-CM01-5-976	FL-CM01-3-1064	FL-CM01-1-1470	FL-CM01-1-1550
Optical [3,6]							
Center Wavelength λ	nm	976	976	976	1064	1470	1550
Wavelength Tolerance	nm	±5	±5	±3	±20	±20	±20
Output Power[2]	W	3	3.5	5	3	1	1
Spectral Width FWHM	nm	≤4	≤4	≤4	≤4	≤9	≤9
Spectral Width FW90%E	nm	≤6	≤6	≤6	\	\	\
Fast Axis Divergence(FWHM) [4]	degree	35	35	35	35	32	32
Slow Axis Divergence (FWHM)	degree	8	8	8	8	8	8
Polarization Mode	-	TE	TE	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/℃	~0.34	~0.34	~0.34	~0.37	~0.4	~0.4
Electrical Parameters [3,6]							
Operating Current I_{op}	A	≤3.3	≤3.8	≤5.2	≤4	≤2.7	≤3.3
Threshold Current I_{th}	A	≤0.7	≤0.5	≤0.8	≤0.45	≤0.35	≤0.45
Operating Voltage V_{op}	V	≤2	≤2	≤2	≤2	≤1.3	≤1.4
Slope Efficiency	W/A	≥1	≥1	≥1	≥0.8	≥0.4	≥0.3
Power Conversion Efficiency	%	≥50	≥50	≥52	≥44	≥32	≥25
Thermal Parameters							
Operating Temperature	℃	15~30	15~30	15~30	15~30	15~20	15~20
Storage Temperature [5]	℃	0~55	0~55	0~55	0~55	0~55	0~55
Recommended Heatsink Capacity	W	≥6	≥7	≥10	≥7	≥2	≥3

[1]Explanation for the name of Module Type：FL(abbreviation of Focuslight) -CM01(structure code) -2(output power) -808(center wavelength).

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Device Dimension (mm)