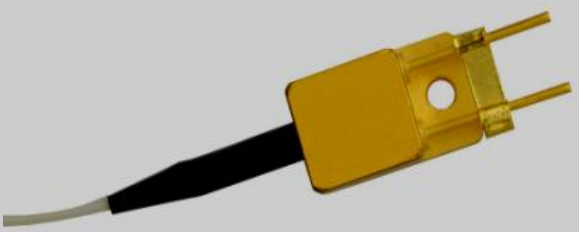
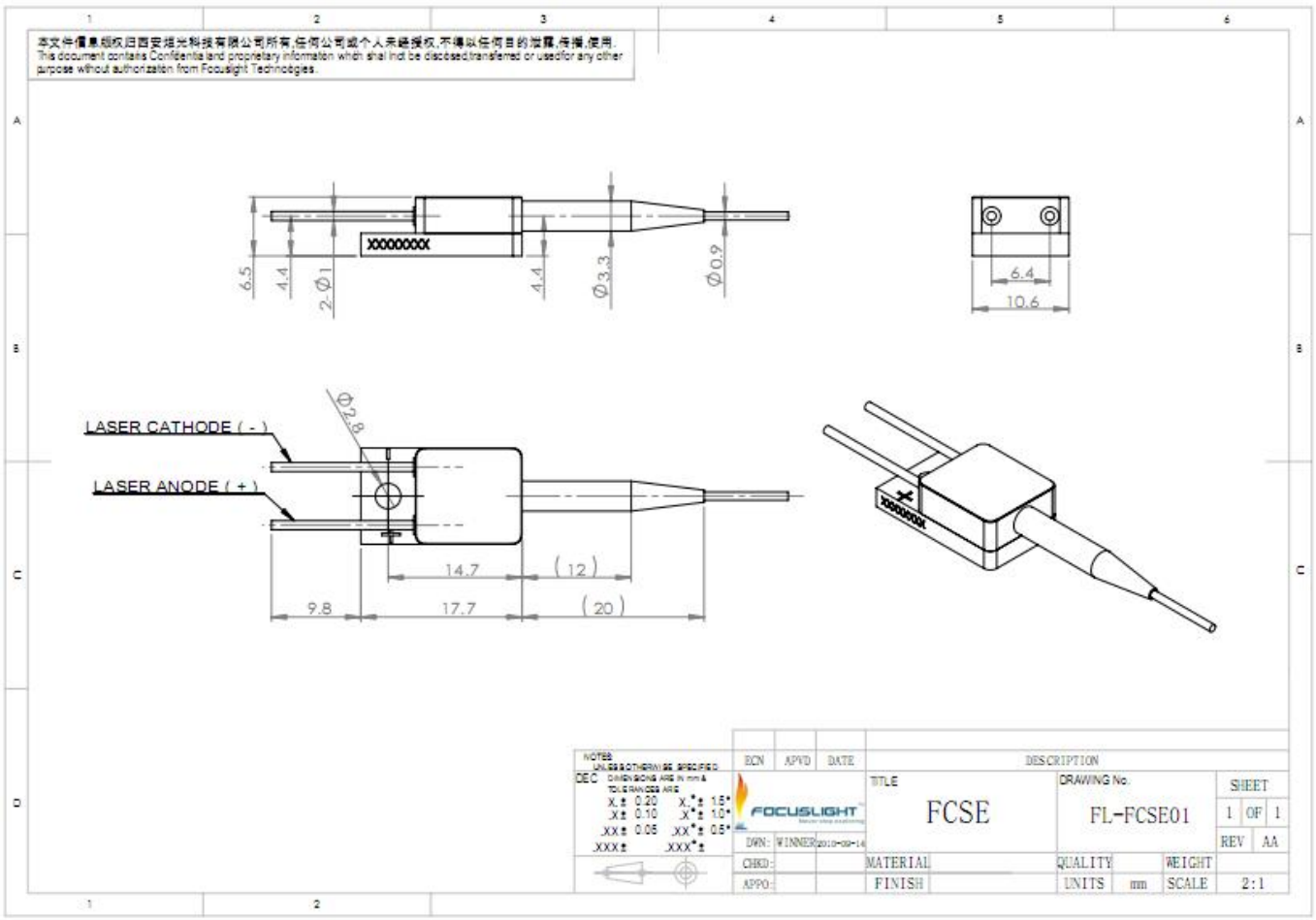
Fiber Coupled Single Emitter Diode Laser (CW)



Features

- **Long lifetime**
- **High power**
- **High coupling efficiency**
- **Parallel seam sealing**

Device Dimension (mm)



This structure drawing is only for reference. For any other special requirement, please feel free to contact us.

Specification

Module Type[1]	Units	FL-FCSE01-2-808	FL-FCSE01-2.5-808	FL-FCSE01-5-808	FL-FCSE03-7-808	FL-FCSE03-8-808
Optical [3,7]						
Center Wavelength λ	nm	808	808	808	808	808
Wavelength Tolerance	nm	±3	±3	±3	±3	±3
Output Power [2]	W	2	2.5	5	7	8
Spectral Width FWHM	nm	≤3	≤3	≤3	≤3	≤3
Spectral Width FW90%E	nm	≤5	≤4	≤4	≤4	≤5
Wavelength Temp. Coefficient	nm/℃	~0.28	~0.28	~0.28	~0.28	~0.28
Fiber Parameters						
Fiber Numerical Aperture	NA	0.15/0.22	0.15/0.22	0.22	0.22	0.22
Fiber Core/Cladding Diameter	μm	105/125 or 200/220	105/125 or 200/220	200/220	200/220	200/220
Connector Type [6]	-	SC ferrule	SC ferrule	SMA905	SMA905	SMA905
Fiber length [5]	m	1.5/2	1.5/2	1.5/2	1.5/2	1.5/2
Electrical Parameters [3,7]						
Operating Current I_{op}	A	≤2.8	≤3	≤6.5	≤8.5	≤11
Threshold Current I_{th}	A	≤0.45	≤0.6	≤0.9	≤1.0	≤1.75
Operating Voltage V_{op}	V	≤2	≤2.2	≤2.2	≤2.1	≤2.2
Slope Efficiency	W/A	≥0.85	≥0.85	≥0.9	≥0.9	≥0.9
Power Conversion Efficiency	%	≥40	≥40	≥40	≥40	≥40
Thermal Parameters						
Operating Temperature	℃	20~30				
Storage Temperature [4]	℃	-40~60				
Recommended Thermal Dissipation Capacity	W	≥5	≥7	≥12	≥16	≥20

[1]Explanation for the name of Module Type：FL（abbreviation of Focusligth）-FCSE01（structure code）-2（output power）-808（center wavelength）.

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

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

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

[5] Fiber length can be specified by customer.

[6]Can be with or without fiber connector.

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

Specification

Module Type[1]	Units	FL-FCSE01-3-915	FL-FCSE01-8-915	FL-FCSE01-3-976	FL-FCSE01-8-976
Optical [3,7]					
Center Wavelength λ	nm	915	915	976	976
Wavelength Tolerance	nm	±5	±5	±5	±5
Output Power[2]	W	3	8	3	8
Spectral Width FWHM	nm	≤3	≤3	≤4	≤4.5
Spectral Width FW90%E	nm	≤5	≤5	≤6	≤6.5
Wavelength Temp. Coefficient	nm/℃	~0.32	~0.32	~0.34	~0.34
Fiber Parameters					
Fiber Numerical Aperture	NA	0.15	0.15	0.15	0.15
Fiber Core/Cladding Diameter	μm	105/125	105/125	105/125	105/125
Fiber length [5]	m	1.5/2	1.5/2	1.5/2	1.5/2
Electrical Parameters [3,7]					
Operating Current I_{op}	A	≤5	≤9.5	≤4.5	≤9
Threshold Current I_{th}	A	≤0.46	≤0.8	≤0.42	≤0.7
Operating Voltage V_{op}	V	≤2	≤2	≤2	≤2
Slope Efficiency	W/A	≥0.9	≥0.9	≥0.9	≥0.9
Power Conversion Efficiency	%	≥45	≥40	≥40	≥42
Thermal Parameters					
Operating Temperature	℃	20~30			
Storage Temperature [4]	℃	-40~60			
Recommended Thermal Dissipation Capacity	W	≥7	≥20	≥7	≥20

[1]Explanation for the name of Module Type：FL（abbreviation of Focusligth）-FCSE01（structure code）-3（output power）-915（center wavelength）.

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

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

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

[5] Fiber length can be specified by customer.

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

Notice

Focuslight keep improving its products to provide our customers with outstanding quality and reliability. We may make changes to specifications and product descriptions at any time, without notice. In addition, we offer a limited warranty to ensure customer satisfaction. For complete details, please contact our sales representative.

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Device Dimension (mm)