Fiber Coupled Multiple Single Emitter Diode Laser (CW)

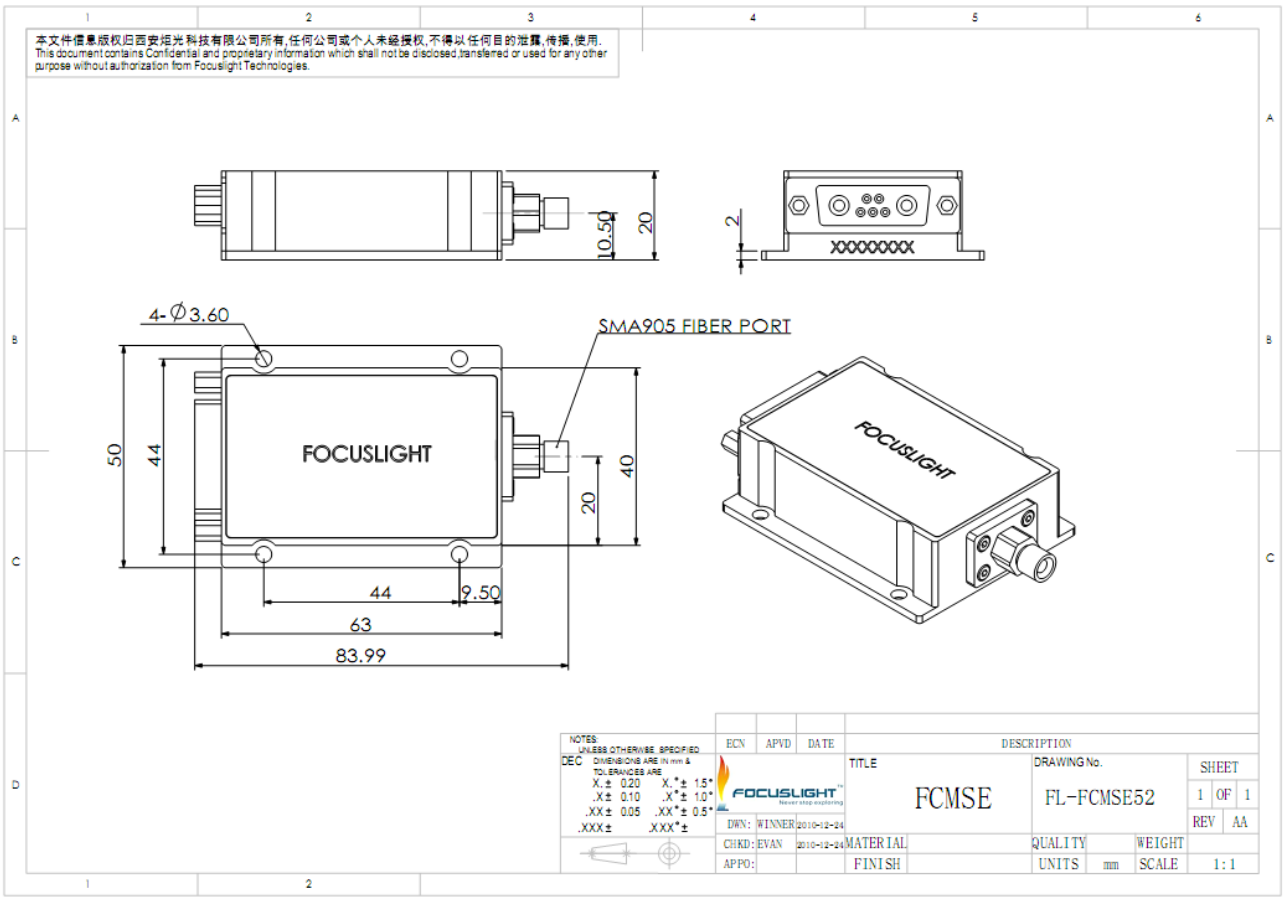
Features

- Long lifetime
- High coupling efficiency
- High power
- 400/440 um detachable fiber

Applications

- Pumping
- Medical

Device Dimension (mm)



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

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Fiber Coupled Multiple Single Emitter Diode Laser (CW)

Specification

Module Type[1]	Units	FL-FCMSE52-10-808	FL-FCMSE52-12-808	FL-FCMSE52-20-808	FL-FCMSE52-10-915	FL-FCMSE52-12-915	FL-FCMSE52-20-915
Optical[3,7]							
Center Wavelength λ	nm	808	808	808	915	915	915
Wavelength Tolerance	nm	±3	±3	±3	±5	±5	±5
Output Power [2]	W	10	12	20	10	12	20
Spectral Width FWHM	nm	≤4	≤4	≤4	≤4	≤4	≤4
Spectral Width FW90%E	nm	≤6	≤6	≤6	≤6	≤6	≤6
Polarization Mode	-	TM	TM	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/℃	~0.28	~0.28	~0.28	~0.32	~0.32	~0.32
Fiber Parameters							
Fiber Numerical Aperture	NA	0.22	0.22	0.22	0.22	0.22	0.22
Fiber Core/Cladding Diameter	μm	400/440	400/440	400/440	400/440	400/440	200/220or400/440
Connector Type [6]	-	SMA905	SMA905	SMA905	SMA905	SMA905	SMA905
Fiber length [5]	m	1.5	1.5	1.5	1.5	1.5	1.5
Electrical Parameters[3,7]							
Operating Current I_{op}	A	≤4.8	≤4.8	≤8	≤4.8	≤5.5	≤8
Threshold Current I_{th}	A	≤1	≤1	≤0.8	≤1	≤1	≤0.8
Operating Voltage V_{op}	V	≤6	≤6	≤6	≤6	≤6	≤6
Slope Efficiency	W/A	≥2.5	≥2.5	≥2.5	≥2.5	≥2.5	≥2.5
Power Conversion Efficiency	%	≥35	≥35	≥35	≥20	≥25	≥40
Thermal Parameters							
Operating Temperature	℃	15~30	15~30	15~30	15~30	15~30	15~30
Storage Temperature[4]	℃	0~55	0~55	0~55	0~55	0~55	0~55
Recommended Thermal Dissipation Capacity	W	≥20	≥25	≥30	≥20	≥25	≥40

[1]Explanation for the name of Module Type：FL(abbreviation of Focusligth) –FCMSE52 (structure code) -10(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.

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Fiber Coupled Multiple Single Emitter Diode Laser (CW)

Specification

Module Type[1]	Units	FL-FCMSE52-10-940	FL-FCMSE52-12-940	FL-FCMSE52-10-976	FL-FCMSE52-12-976	FL-FCMSE52-20-976
Optical[3,7]						
Center Wavelength λ	nm	940	940	976	976	976
Wavelength Tolerance	nm	±5	±5	±5	±5	±5
Output Power [2]	W	10	12	10	12	20
Spectral Width FWHM	nm	⩽4	⩽4	⩽4	⩽4	⩽4
Spectral Width FW90%E	nm	⩽6	⩽6	⩽6	⩽6	⩽6
Polarization Mode	-	TE	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/℃	~0.33	~0.33	~0.34	~0.34	~0.34
Fiber Parameters						
Fiber Numerical Aperture	NA	0.22	0.22	0.22	0.22	0.22
Fiber Core/Cladding Diameter	μm	400/440	400/440	200/220or400/440	200/220or400/440	200/220or400/440
Connector Type [6]	-	SMA905	SMA905	SMA905	SMA905	SMA905
Fiber length [5]	m	1.5	1.5	1.5	1.5	1.5
Electrical Parameters[3,7]						
Operating Current I_{op}	A	⩽4.8	≤5.5	⩽4.8	⩽5.5	⩽8
Threshold Current I_{th}	A	⩽1	⩽1	⩽1	⩽1	⩽0.8
Operating Voltage V_{op}	V	⩽6	⩽6	⩽6	⩽6	⩽6
Slope Efficiency	W/A	⩾2.5	⩾2.5	⩾2.5	⩾2	⩾2
Power Conversion Efficiency	%	≥20	≥25	≥20	≥25	≥40
Thermal Parameters						
Operating Temperature	℃	15~30	15~30	15~30	15~30	15~30
Storage Temperature[4]	℃	0~55	0~55	0~55	0~55	0~55
Recommended Thermal Dissipation Capacity	W	≥25	≥30	≥25	≥30	≥40

[1]Explanation for the name of Module Type：FL(abbreviation of Focusligth) –FCMSE52 (structure code) -10(output power) -808(center wavelength).

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

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[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.

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