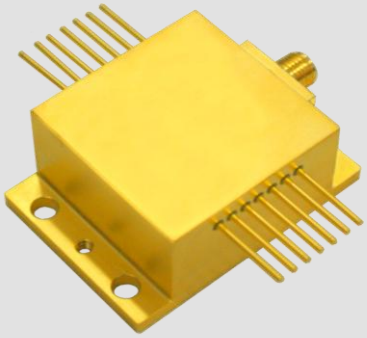
Fiber Coupled Single Emitter FCSE04 Series (CW)



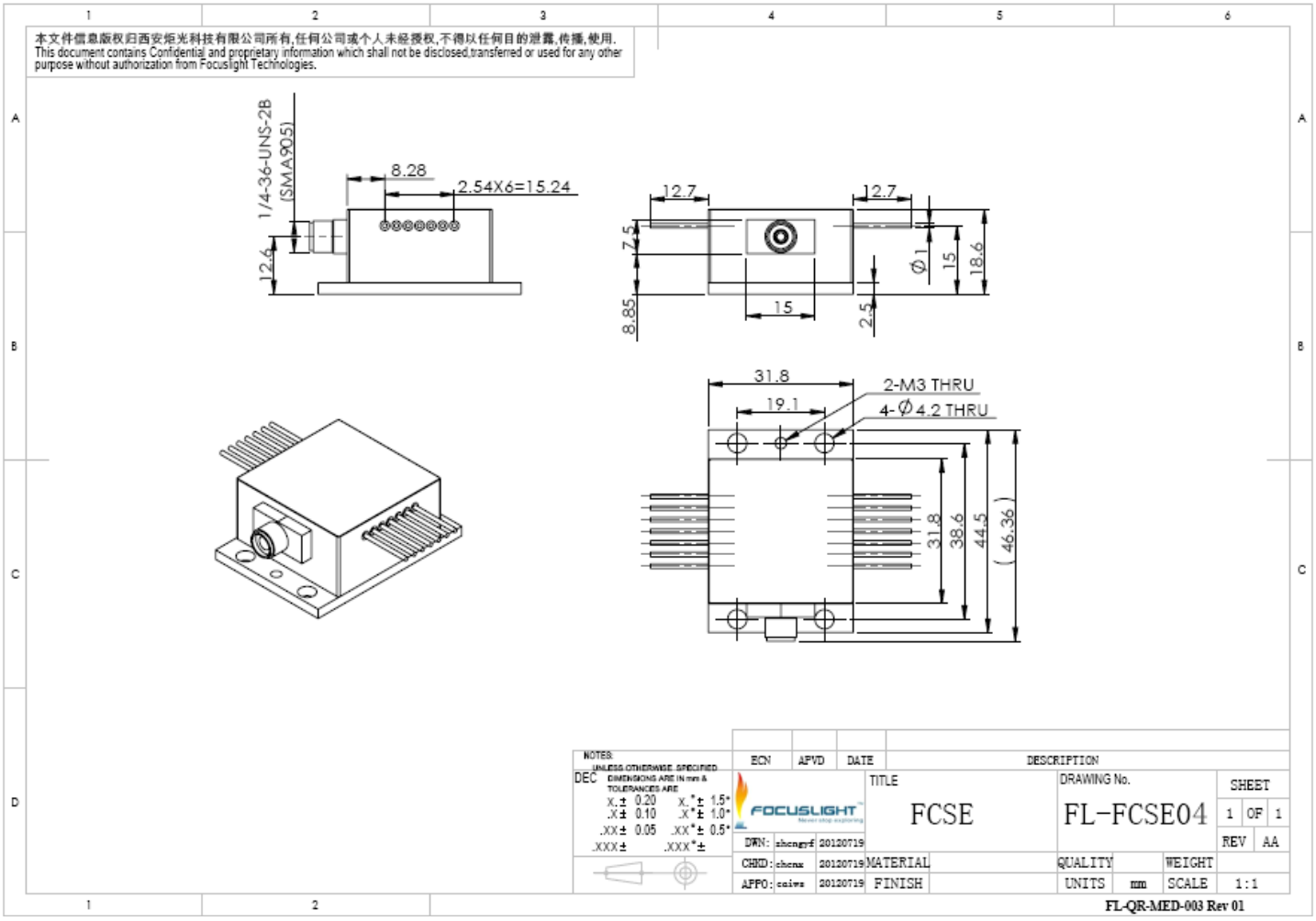
Features

- Thermal energy converter
- Monitor thermister
- Fiber detection sensor
- High coupling efficiency
- Aiming beam
- Monitor photodiode
- High power
- High brightness

Applications

- Medical
- Scientific research
- Pumping fiber laser
- Material processing

Device Dimension (mm)



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

Fiber Coupled Single Emitter FCSE04 Series (CW)

Specification

Module Type[1]	Units	FL-FCSE04-7-808	FL-FCSE04-8-915	FL-FCSE04-8-976
Optical [3,7]				
Center Wavelength λ	nm	808	915	976
Wavelength Tolerance	nm	±3	±5	±5
Output Power [2]	W	7	8	8
Spectral Width FWHM	nm	≤4	≤4	≤4
Wavelength Temp. Coefficien	nm/℃	~0.28	~0.3	~0.34
Fiber Parameters				
Fiber Numerical Aperture	NA	0.22	0.22	0.22
Fiber Core/Cladding Diameter	μm	200	200	200
Connector Type [6]	-	SMA905 /ST	SMA905 /ST	SMA905 /ST
Fiber length [5]	m	1.5	1.5	1.5
Electrical Parameters [3,7]				
Operating Current I_{op}	A	≤8.8	≤9.2	≤9.2
Threshold Current I_{th}	A	≤1.8	≤0.8	≤0.8
Operating Voltage V_{op}	V	≤2.2	≤2	≤2
Slope Efficiency	W/A	≥0.9	≥0.9	≥0.9
Power Conversion Efficiency	%	≥42	≥45	≥48
Operating Current Imo	mA	0~2	0~2	0~2
Thermistor Rt	(KΩ)/β(25℃)	10±0.5%/3862	10±0.5%/3862	10±0.5%/3862
Aiming Beam Parameters [8]	mA	< 40@2mW 650nm	< 40@2mW 650nn	< 40@2mW 650nm
TEC Parameters[8]				
Operating Current It	A	3	3	3
Operating Voltage Vt	V	8.5	8.5	8.5
Thermal Parameters				
Operating Temperature	℃	15~30	15~30	15~30
Storage Temperature[4]	℃	-20~80	-20~80	-20~80
Recommended Thermal Dissipation Capacity	W	≥20	≥20	≥20

[1]Explanation for the name of Module Type：FL (abbreviation of Focuslight) -FCSE04 (structure code) -8(output power) -976 (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]Customised fiber length.

[6]Customised fiber connector type.

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

[8]The customer can choose the four options(Aiming Beam, Thermistor, TEC and PD)

[9]$R_T=R_0*\exp(\beta(1/T-1/T_0))$, ($T_0$=25℃=298K).

Focuslight Technologies Co,. Ltd.

Distributed by:
LASERAND, Inc
Montreal, QC, Canada
Tel: 514 452-4693
Email: sales@laserand.com
Website: www.laserand.com

FOCUSLIGHT® Never stop exploring