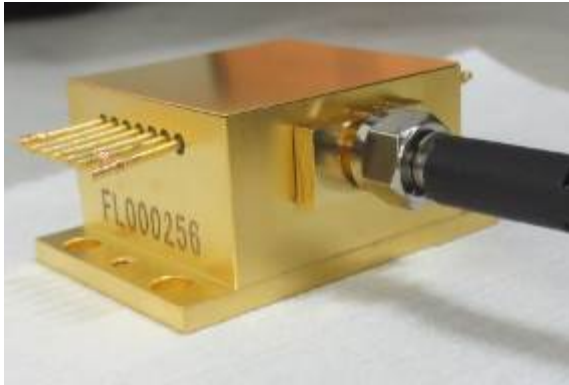


FocusFiber®

Fiber Coupled Multiple Single Emitter Series (CW)

FCSE04



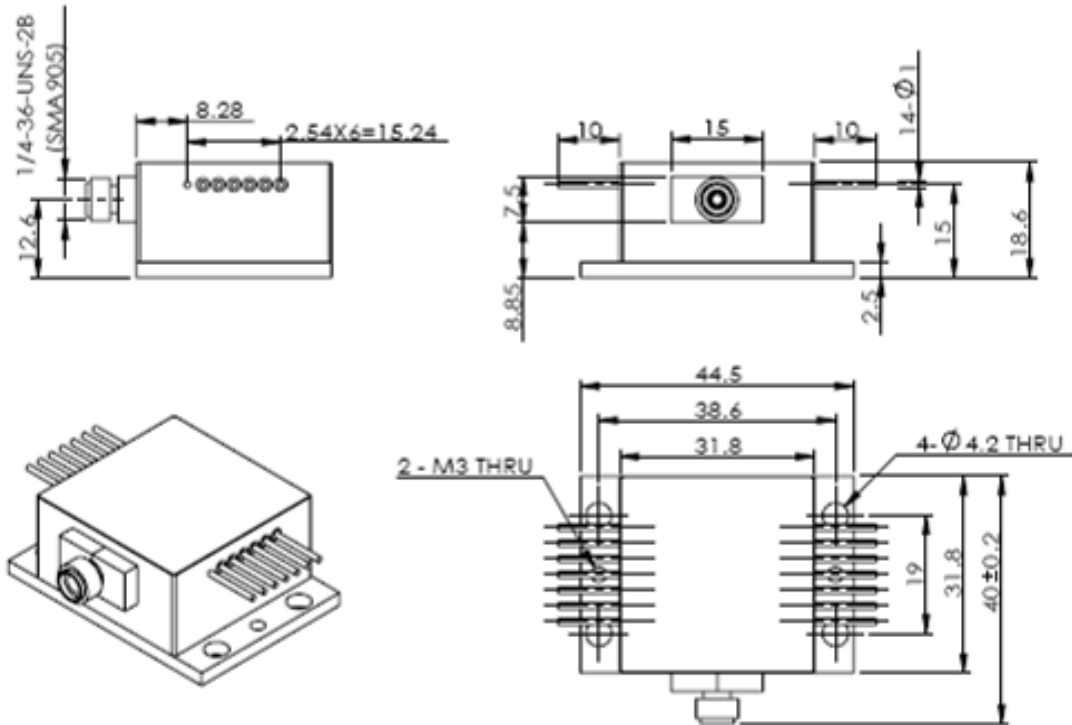
Features

- Thermal energy converter
- Monitor thermistor
- 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.

Specification

Module Type ¹	Units	FL-FCSE04-8-808	FL-FCSE04-10-976
Optical^{3,7}			
Center Wavelength λ	nm	808	976
Wavelength Tolerance	nm	± 3	± 5
Output Power ²	W	8	10
Spectral Width FWHM	nm	≤ 4	≤ 6
Wavelength Temp. Coefficient	nm/ $^{\circ}\text{C}$	~ 0.28	~ 0.34
Fiber Parameters			
Fiber Numerical Aperture	NA	0.22	0.22
Fiber Core/Cladding Diameter	μm	200/220	200/220
Connector Type ⁶	-	SMA905	SMA905
Fiber length ⁵	m	1.5	1.5
Electrical Parameters^{3,7}			
Operating Current I_{op}	A	≤ 10.5	≤ 11.5
Threshold Current I_{th}	A	≤ 1.8	≤ 0.9
Operating Voltage V_{op}	V	≤ 2.2	≤ 2
Slope Efficiency	W/A	≥ 0.9	≥ 0.9
Power Conversion Efficiency	%	≥ 40	≥ 45
Operating Current I_{mo}	mA	0~15	0~15
Thermistor R_t	(K Ω)/ β (25 $^{\circ}\text{C}$)	10 \pm 0.5%/3862	10 \pm 0.5%/3862
Aiming Beam Parameters ⁸	mA	< 40@2mW 650nm	< 40@2mW 650nm
TEC Parameters⁸			
Operating Current I_t	A	6	6
Operating Voltage V_t	V	8.8	8.8
Thermal Parameters			
Operating Temperature	$^{\circ}\text{C}$	15~30	15~30
Storage Temperature ⁴	$^{\circ}\text{C}$	-20~80	-20~80
Recommended Thermal Dissipation Capacity	W	≥ 25	≥ 30

¹Explanation for the name of Module Type: FL(abbreviation of Focuslight) –FCSE04(structure code) -8(output power) -808(center wavelength).

²Reduced lifetime if used above nominal operating conditions.

³Data at 25 $^{\circ}\text{C}$ temperature, unless otherwise stated.

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

⁵Fiber length can be specified by customer.



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



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