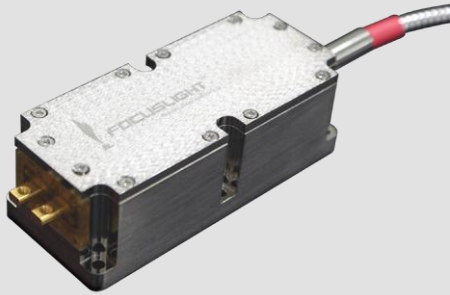


# Fiber Coupled Single Bar Diode Laser (CW)



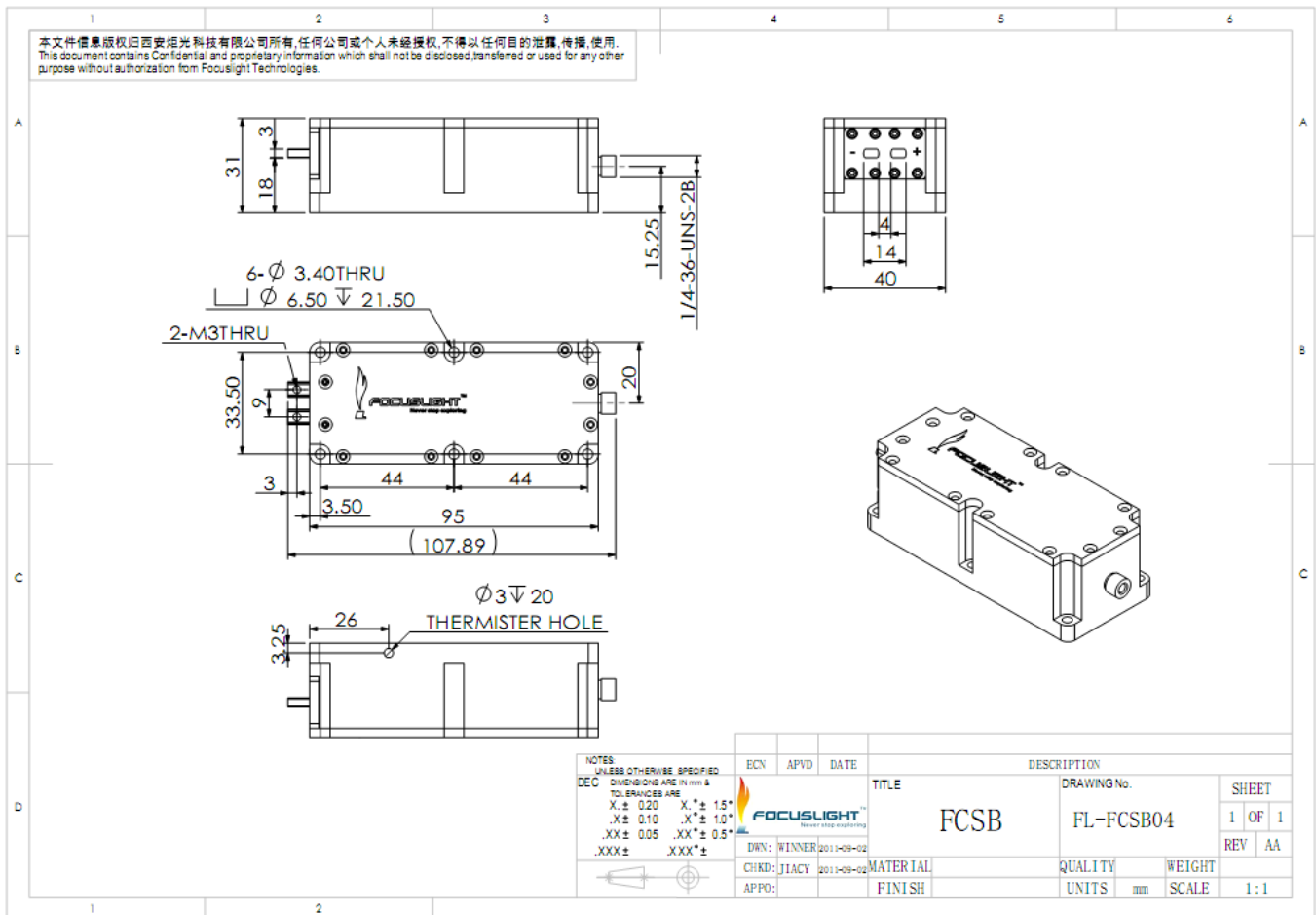
## Features

- Long lifetime
- High coupling efficiency
- High power
- High stability

## Applications

- Pumping
- Scientific research
- Medical
- Industry

## Device Dimension (mm)



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

# Fiber Coupled Single Bar Diode Laser (CW)

## Specification

Module Type <sup>1</sup>	Units	FL-FCSB04-30-808	FL-FCSB04-40-808	FL-FCSB04-30-976	FL-FCSB04-40-976
<b>Optical</b> <sup>3,7</sup>					
Center Wavelength $\lambda$	nm	808	808	976	976
Wavelength Tolerance	nm	$\pm 3$	$\pm 3$	$\pm 5$	$\pm 5$
Output Power <sup>2</sup>	W	30	40	30	40
Spectral Width FWHM	nm	$\leq 4$	$\leq 4$	$\leq 4$	$\leq 4$
Spectral Width FW90%E	nm	$\leq 6$	$\leq 6$	$\leq 6$	$\leq 6$
Polarization Mode	-	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/°C	$\sim 0.28$	$\sim 0.28$	$\sim 0.34$	$\sim 0.34$
<b>Fiber Parameters</b>					
Fiber Numerical Aperture	NA	0.22	0.22	0.22	0.22
Fiber Core/Cladding Diameter	$\mu\text{m}$	200 or 400	400	200 or 400	400
Connector Type <sup>6</sup>	-	SMA905	SMA905	SMA905	SMA905
Fiber Length	m	1.5	1.5	1.5	1.5
<b>Electrical Parameters</b> <sup>3,7</sup>					
Operating Current $I_{op}$	A	$\leq 45$	$\leq 63$	$\leq 42$	$\leq 55$
Threshold Current $I_{th}$	A	$\leq 9$	$\leq 18$	$\leq 7$	$\leq 7$
Operating Voltage $V_{op}$	V	$\leq 2$	$\leq 2$	$\leq 2$	$\leq 2$
Slope Efficiency	W/A	$\geq 0.8$	$\geq 0.85$	$\geq 0.85$	$\geq 0.85$
Power Conversion Efficiency	%	$\geq 35$	$\geq 35$	$\geq 40$	$\geq 40$
<b>Thermal Parameters</b>					
Operating Temperature	°C	15~30	15~30	15~30	15~30
Storage Temperature <sup>4</sup>	°C	0~55	0~55	0~55	0~55
Recommended Thermal Dissipation Capacity	W	$\geq 80$	$\geq 120$	$\geq 80$	$\geq 140$

<sup>1</sup>Explanation for the name of Module Type: FL(abbreviation of Focuslight) –FCSB04(structure code) -30(output power) -808(center wavelength).

<sup>2</sup>Reduced lifetime if used above nominal operating conditions.

<sup>3</sup>Data at 25°C temperature, unless otherwise stated.

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

<sup>5</sup>Fiber length can be specified by customer.

<sup>6</sup>Can be with or without fiber connector.

<sup>7</sup>If there are any other requirements, please contact us.



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