

# FocusFiber®

## Fiber Coupled Multiple Single Emitter FCMSE58 Series (CW)

### FCMSE58



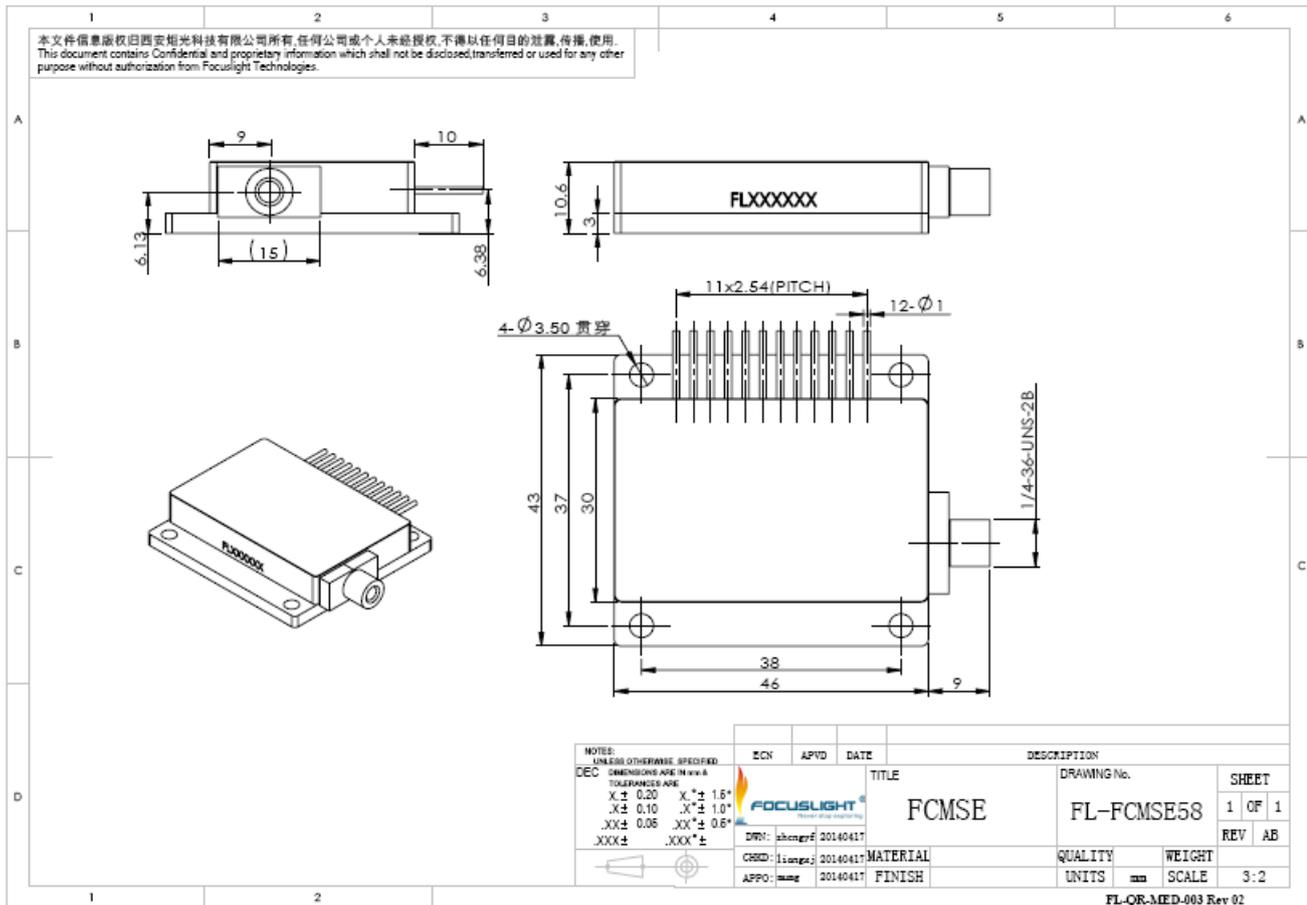
#### Features

- High power
- Aiming beam /monitor photodiode/ thermistor/ Fiber detection sensor

#### Applications

- Medical
- Scientific research
- Pumping
- IR illumination

### Device Dimension (mm)



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

## Fiber Coupled Multiple Single Emitter FCMSE58 Series (CW)

### Specification

Module Type <sup>1</sup>	Units	FL-FCMSE58-25-808	FL-FCMSE58-30-976
<b>Optical<sup>3,6</sup></b>			
Center Wavelength $\lambda$	nm	808	976
Wavelength Tolerance	nm	$\pm 3$	$\pm 5$
Output Power <sup>2</sup>	W	25	30
Spectral Width FWHM	nm	$\leq 4$	$\leq 6$
Wavelength Temp. Coefficient	nm/°C	$\sim 0.28$	$\sim 0.34$
<b>Fiber Parameters</b>			
Fiber Numerical Aperture	NA	0.22	0.22
Fiber Core Diameter	$\mu\text{m}$	200	200
Connector Type	-	SMA905	SMA905
Fiber length <sup>5</sup>	m	1.5	1.5
<b>Electrical Parameters<sup>3,6</sup></b>			
Operating Current $I_{op}$	A	$\leq 9$	$\leq 9$
Threshold Current $I_{th}$	A	$\leq 1.8$	$\leq 0.7$
Operating Voltage $V_{op}$	V	$\leq 7.5$	$\leq 7.5$
Slope Efficiency	W/A	$\geq 2.8$	$\geq 3.5$
Power Conversion Efficiency	%	$\geq 40$	$\geq 50$
Operating Current $I_{mo}$	mA	0-5	0-5
Thermistor $R_t$	(K $\Omega$ )/ $\beta$ (25°C)	10 $\pm$ 0.5%/3862	10 $\pm$ 0.5%/3862
Red Aiming Beam Parameters	mW	>2mW 650nm@5V	>2mW 650nm@5V
<b>Thermal Parameters</b>			
Operating Temperature	°C	15~30	15~30
Storage Temperature <sup>4</sup>	°C	-20~80	-20~80
Recommended Heatsink Capacity	W	$\geq 75$	$\geq 75$

<sup>1</sup>Explanation for the name of Module Type: FL(abbreviation of Focuslight) –FCMSE58 (structure code) -25(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. 0.9mm PBTP is available for standard products.

<sup>6</sup>If there are any other requirements, please contact us.

<sup>7</sup>FL-FCMSE58-25-808 no fiber detection sensor



#### Focuslight Technologies Inc.

Add: 56 Zhangba 6<sup>th</sup> Road, High-Tech Zone  
Xi'an, Shaanxi 710077, P. R. China

Tel: +86 29 8956 0050

Fax: +86 29 8177 5810

Email: [sales@focuslight.com.cn](mailto:sales@focuslight.com.cn)

Website: [www.focuslight.com.cn](http://www.focuslight.com.cn)

Copyright ©2015 Focuslight. All rights reserved.

