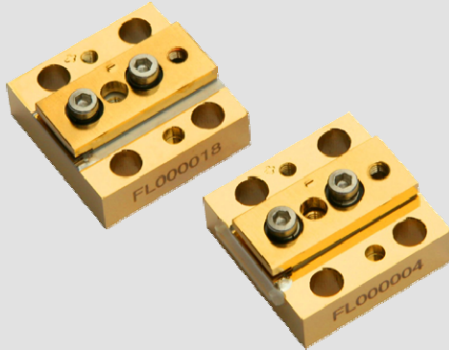


Hard Solder Conduction Cooled Single Bar Diode Laser (CW)



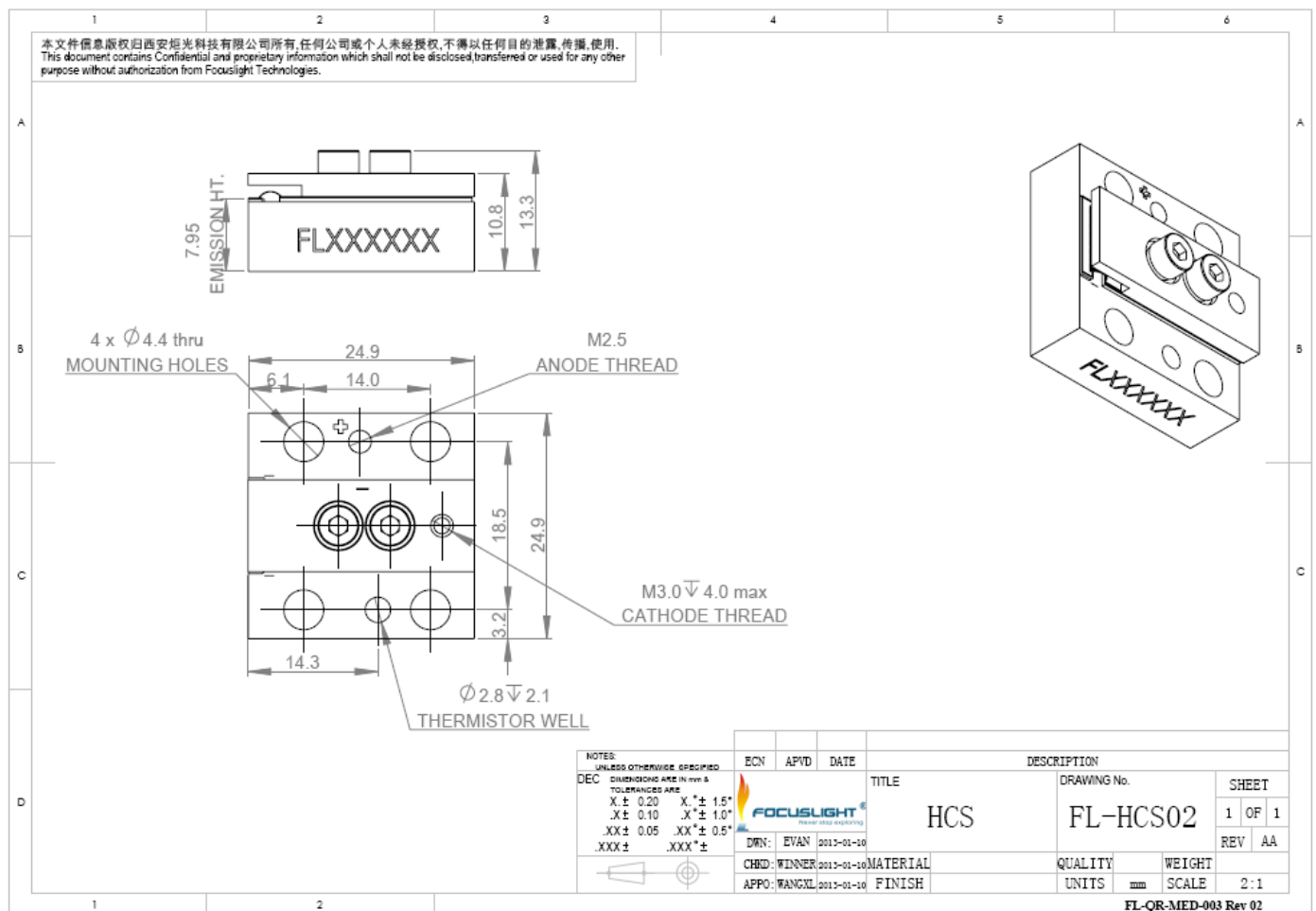
Features

- Long lifetime
- Low smile
- AuSn bonding
- Harsh environment applications
- High reliability
- Narrow spectrum
- Wire bonding
- Long storage time

Applications

- Pumping
- Printing
- 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.

Hard Solder Conduction Cooled Single Bar Diode Laser (CW)

Specification

Module Type ¹	Units	FL-HCS02-50-792	FL-HCS02-50-808	FL-HCS02-50-825	FL-HCS02-80-915	FL-HCS02-80-940	FL-HCS02-80-976
Optical ^{3,6}							
Center Wavelength λ	nm	792	808	825	915	940	976 / 980
Wavelength Tolerance	nm	± 3	± 3	± 3	± 5	± 5	± 5
Output Power ²	W	50	50	50	80	80	80
Number of Emitters	#	19	19	19	19	19	19
Emitter Size	um	150	100/150	150	100/150	100/150	100/150
Fill Factor	%	30	20/30	30	20/30	20/30	20/30
Spectral Width FWHM	nm	≤ 3	≤ 3	≤ 4	≤ 4	≤ 4	≤ 4
Spectral Width FW90%E	nm	≤ 5	≤ 5	≤ 6	≤ 6	≤ 6	≤ 6
Fast Axis Divergence(FWHM)	degree	~ 35	~ 35	~ 35	~ 40	~ 40	~ 40
Slow Axis Divergence (FWHM)	degree	~ 8	~ 8	~ 8	~ 8	~ 8	~ 8
Polarization Mode	-	TE	TE	TM/TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/°C	~ 0.28	~ 0.28	~ 0.28	~ 0.33	~ 0.33	~ 0.33
Electrical Parameters ^{3,6}							
Operating Current I_{op}	A	≤ 60	≤ 60	≤ 60	≤ 90	≤ 90	≤ 90
Threshold Current I_{th}	A	≤ 15	≤ 15	≤ 15	≤ 10	≤ 10	≤ 10
Operating Voltage V_{op}	V	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Slope Efficiency	W/A	≥ 1.0	≥ 1.0	≥ 1.1	≥ 1.1	≥ 1.1	≥ 1.1
Power Conversion Efficiency	%	≥ 45	≥ 45	≥ 45	≥ 50	≥ 50	≥ 55
Thermal Parameters							
Operating Temperature	°C	15~35	15~35	15~35	15~35	15~35	15~35
Storage Temperature ⁴	°C	-40~55	-40~55	-40~55	-40~55	-40~55	-40~55
Recommended Heatsink Cap	W	≥ 100	≥ 100	≥ 100	≥ 160	≥ 160	≥ 160

¹Explanation for the name of Module Type: FL(abbreviation of Focuslight) -HCS02(structure code) -50(output power) -792(center wavelength)

²Reduced lifetime if used above nominal operating conditions.

³Data at 25°C temperature, unless otherwise stated.

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

⁵For smile requirements, please contact us.

⁶If there are any other requirements, please contact us.



Focuslight Technologies Inc.

Add: 56 Zhangba 6th 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

Website: www.focuslight.com.cn

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