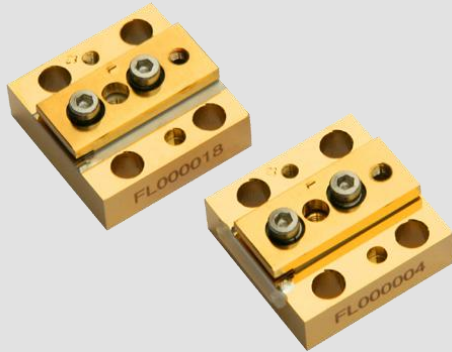


Hard Solder Conduction Cooled Single Bar Diode Laser (CW)



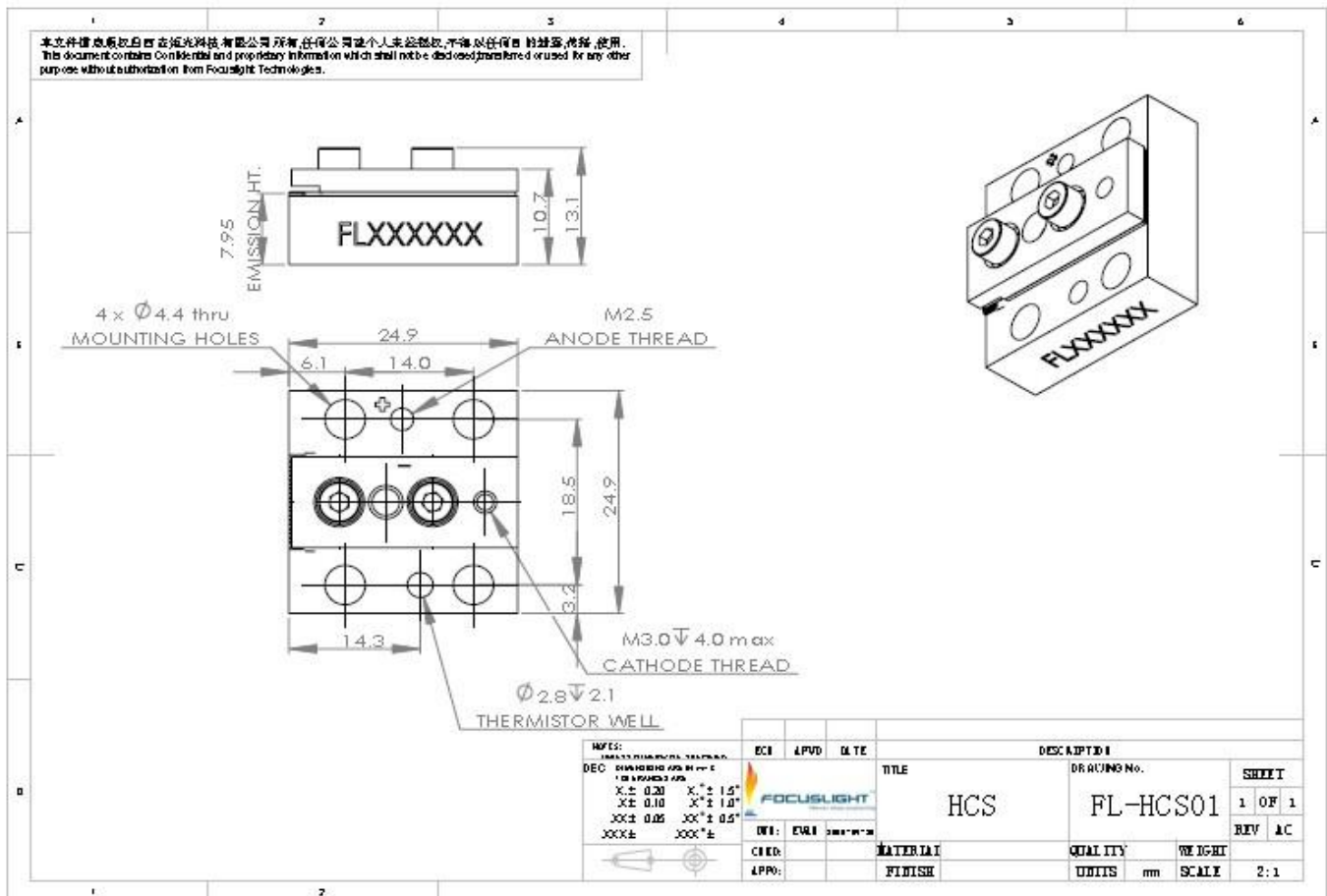
Features

- Long lifetime
- Low smile
- AuSn bonding
- Harsh environment applications
- High reliability
- Narrow spectrum
- 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-HCS01-40-808	FL-HCS01-50-825	FL-HCS01-60-915	FL-HCS01-60-940	FL-HCS01-60-976
Optical ^{3,8}						
Center Wavelength λ	nm	808	825	915	940	976
Wavelength Tolerance	nm	± 3	± 3	± 5	± 5	± 5
Output Power ²	W	40	50	60	60	60
Spectral Width FWHM	nm	≤ 3	≤ 4	≤ 4	≤ 4	≤ 4.5
Spectral Width FW90%E	nm	≤ 8	≤ 6	≤ 8	≤ 8	≤ 8
Fast Axis Divergence(FWHM) ^{4,7}	degree	35	35	35	35	35
Slow Axis Divergence (FWHM) ⁵	degree	8	8	8	8	8
Polarization Mode	-	TE	TM	TE	TE	TE
Wavelength Temp. Coefficient	nm/°C	~ 0.28	~ 0.28	~ 0.32	~ 0.33	~ 0.34
Electrical Parameters ^{3,8}						
Operating Current I_{op}	A	≤ 54	≤ 60	≤ 60	≤ 65	≤ 65
Threshold Current I_{th}	A	≤ 14	≤ 15	≤ 8	≤ 9	≤ 9
Operating Voltage V_{op}	V	≤ 2	≤ 2	≤ 1.8	≤ 1.8	≤ 1.8
Slope Efficiency	W/A	≥ 1.00	≥ 1.1	≥ 1.05	≥ 1.05	≥ 0.95
Power Conversion Efficiency	%	≥ 42	≥ 45	≥ 50	≥ 55	≥ 50
Thermal Parameters						
Operating Temperature	°C	15~35	15~35	15~35	15~35	15~35
Storage Temperature ⁶	°C	0~55	0~55	0~55	0~55	0~55
Recommended Heatsink Capacity	W	≥ 80	≥ 110	≥ 100	≥ 100	≥ 100

¹Explanation for the name of Module Type: FL(abbreviation of Focuslight) -HCS01(structure code) -40(output power) -808(center wavelength).

²Reduced lifetime if used above nominal operating conditions.

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

⁴For fast axis collimation: divergence $< 0.5^\circ$.

⁵Slow axis collimation is available for bars with fill factor $\leq 30\%$.

⁶A non-condensing environment is required for storage and operation below ambient dew point.

⁷For smile requirements, please contact us.

⁸If there are any other requirements, please contact us.



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