

# Conduction Cooled Single Bar Diode Laser (CW) HCS02



#### Features

- AuSn bonding
- Low smile
- Harsh environment use

#### **Applications**

- Pumping
- Industry
- Printing
- Medical
- Scientific research

### Product Dimensions (mm)



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.



## **Product Specifications**

Product Code		OPD000059	OPD000062	OPD000064	OPD000056
Part No. <sup>1</sup>		FL-HCS02-60-808	FL-HCS02-80-940	FL-HCS02-80-976	FL-HCS02-60-1060
Optical Data <sup>2</sup>	Unit	Value			
Centroid Wavelength	nm	808	940	976	1060
Wavelength Tolerance	nm	± 3	± 5	± 5	± 15
Output Power <sup>3</sup>	W	60	80	80	60
Emitter Size	μm	100	100	100	200
Fill Factor	%	20	20	20	50
Spectral Width FWHM	nm	≤ 4	≤ 4.5	≤ 4.5	1
Spectral Width 90% Energy	nm	≤ 6	≤ 8	≤ 8	1
Fast Axis Divergence (FWHM)	0	~ 35	~ 40	~ 40	~ 40
Slow Axis Divergence (FWHM)	0	~8	~8	~8	~8
Polarization Mode	-	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm / °C	~ 0.28	~ 0.33	~ 0.34	~ 0.4
Electrical Data <sup>2</sup>					
Operation Current	А	≤ 70	≤ 90	≤ 90	≤ 75
Threshold Current	А	≤ 10	≤ 12	≤ 12	≤ 12
Operating Voltage/Bar	V	≤ 2	≤ 2	≤2	≤ 2
Slope Efficiency/Bar	W/A	≥ 1	≥ 1.1	≥ 1.1	≥ 0.9
Power Conversion Efficiency	%	≥ 50	≥ 50	≥ 50	≥ 50
Thermal Data					
Operating Temperature	°C	15 ~ 35	15 ~ 35	15 ~ 35	15 ~ 35
Storage Temperature <sup>4</sup>	°C	-40~ 55	-40~ 55	-40~ 55	-40~ 55
Recommended Heatsink Capacity	W	≥ 120	≥ 160	≥ 160	≥ 120
Product Code		OPD000060	OPD000063	OPD000066	OPD000057
Part No. <sup>1</sup>		FL-HCS02-60-808-Y	FL-HCS02-80-940-Y	FL-HCS02-80-976-Y	FL-HCS02-60-1060-Y
Optical Data <sup>2</sup>	Unit	Value			
Fast Axis Divergence (FWHM) All other specifications same as ab	° oove.	< 0.5	< 0.5	< 0.5	<0.5

<sup>1</sup>Part No. = Brand Code - Series - Power - Centroid Wavelength (- Collimation).

<sup>2</sup>Data at 25°C temperature, unless otherwise stated.

<sup>3</sup>Lifetime reduced if overused under nominal operating condition.

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



#### Rev 04 | Updated March 18, 2022