



# Eye-Safe Wavelength and NIR CS-Mounted Bars

## Applications

- Laser pumping: Solid state lasers, Fiber lasers
- Medical: Dermatology, Aesthetic
- Printing: Computer to plate, flexography
- Materials Processing: Plastic welding
- Defense: Illumination

## Features

- Up to 50 W from a conduction cooled package
- 795 nm, 808 nm, 940 nm, 1470 nm, and 1532 nm
- Industry leading power per emitter
- Fast and slow axis collimating lens available



## Benefits

- Highest performance from solid state and fiber lasers due to industry leading brightness and power
- Increased throughput for printing applications from industry leading power and brightness
- Reduced system cost by reducing the number of bars
- Longer working distance, simpler optical design

CONDUCTION COOLED LASER BARS									
PART NO.	4101-A	4101-B	4201-A	4201-B	4301-A	4301-B	4401-A	4401-B	4501
Center Wavelength	795 nm	795 nm	808 nm	808 nm	940 nm	940 nm	1470 nm	1470 nm	1532 nm
Wavelength Tolerance	±3 nm	±3 nm	±3 nm	±3 nm	±3 nm	±3 nm	±5 nm	±5 nm	±5 nm
Spectral Width (FWHM)	<3 nm	<3 nm	<3 nm	<3 nm	<3 nm	<3 nm	<12 nm	<12 nm	<12 nm
Output Power	40 W	50 W	40 W	50 W	40 W	50 W	20 W	25 W	20 W
Operating Current	<47 A	<63 A	<47 A	<63 A	<50 A	<70 A	<55 A	<75 A	<60 A
Operating Voltage	<1.85 V	<1.85 V	<1.85 V	<1.85 V	<1.6 V	<1.6 V	<1.5 V	<1.5 V	<1.5 V
Threshold Current	<10 A	<17.5 A	<10 A	<15 A	<12 A	<18 A	<8 A	<9 A	<8 A
Slope Efficiency	>1.05 W/A	>1.05 W/A	>1.05 W/A	>1.05 W/A	>0.95 W/A	>0.95 W/A	>0.4 W/A	>0.4 W/A	>0.4 W/A
Conversion Efficiency	>45 %	>45 %	>45 %	>45 %	>50 %	>50 %	>35 %	>30 %	>30 %
dλ/dT	0.3 nm/°C	0.3 nm/°C	0.3 nm/°C	0.3 nm/°C	0.3 nm/°C	0.3 nm/°C	0.35 nm/°C	0.35 nm/°C	0.35 nm/°C
Slow Axis Divergence (FWHM)	<10 deg.	<10 deg.	<10 deg.	<10 deg.	<10 deg.	<10 deg.	<12 deg.	<12 deg.	<12 deg.
Fast Axis Divergence (FWHM)	<40 deg.	<40 deg.	<40 deg.	<40 deg.	<35 deg.	<35 deg.	<38 deg.	<38 deg.	<38 deg.
Number of Emitters	19	25	19	25	19	25	19	25	19
Emitter Width	150 micron	200 micron	150 micron	200 micron	150 micron	200 micron	100 micron	100 micron	100 micron
Emitter Spacing	500 micron	400 micron	500 micron	400 micron	500 micron	400 micron	500 micron	400 micron	500 micron
Fill Factor	30 %	50 %	30 %	50 %	30 %	50 %	20 %	25 %	20 %
Polarization	TE	TE	TE	TE	TE	TE	TE	TE	TE
Bar Emission Width	9.7 mm	10.1 mm	9.7 mm	10.1 mm	9.7 mm	10.1 mm	9.5 mm	10.0 mm	9.5 mm

Operating conditions at 20 degrees Celsius unless otherwise noted



光技術をサポートする  
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 Breaking Performance Barriers through Semiconductor Laser Innovation

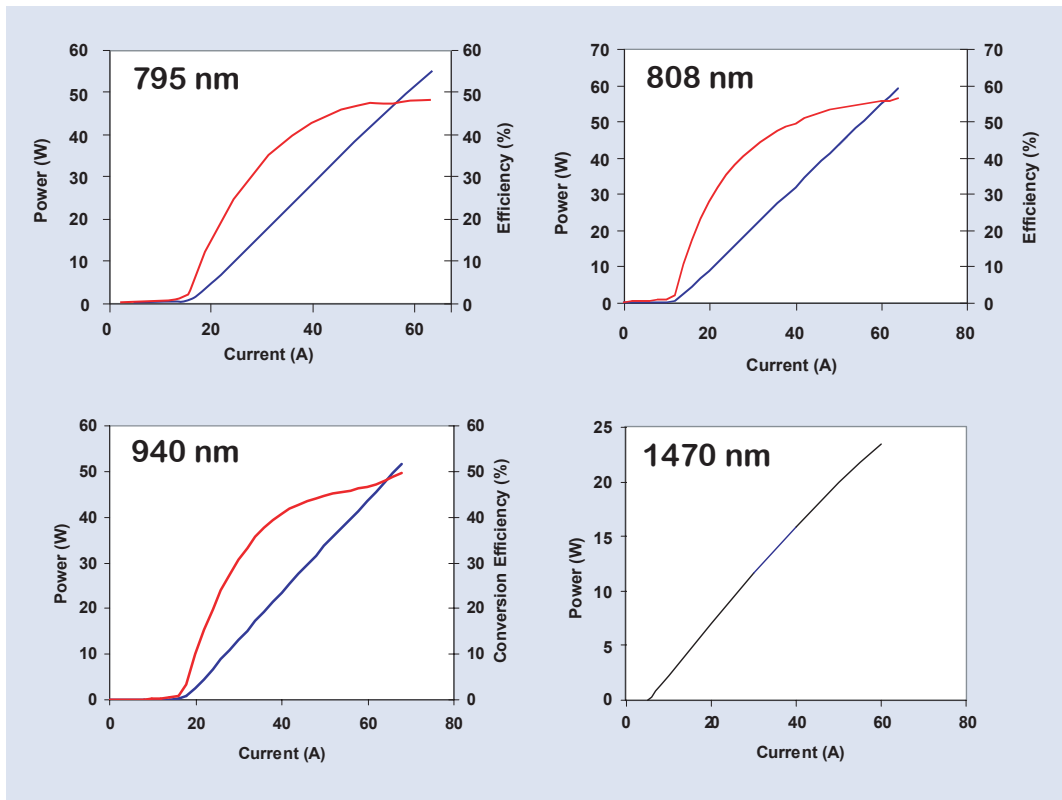
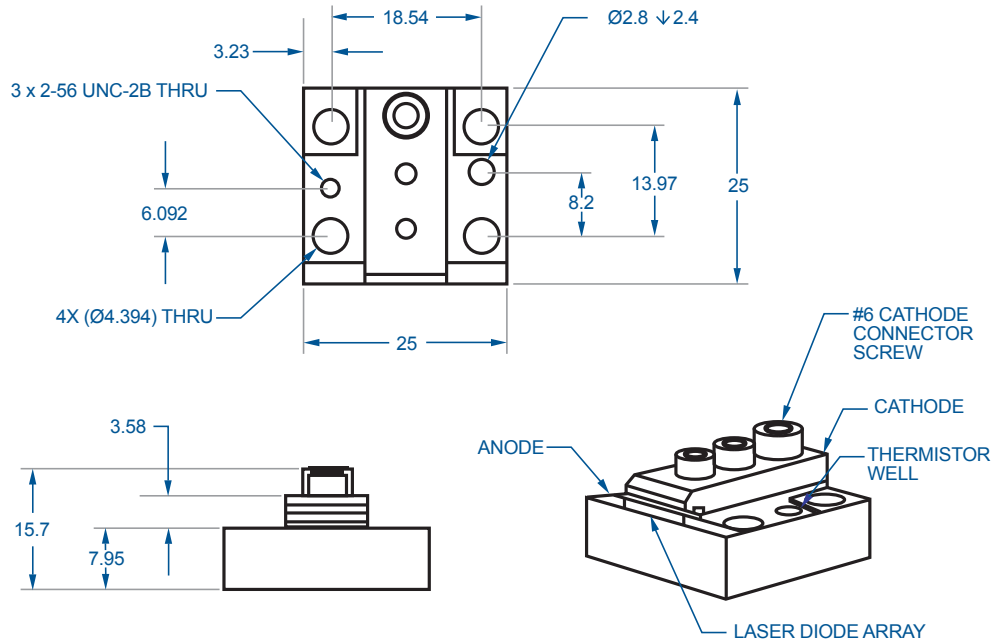
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