



# BrightLase® Single Mode Single Emitters

## Applications

- Direct materials processing
- Engine for visible lasers
- Fiber laser seeding, core pumping
- Laser communications



## Features

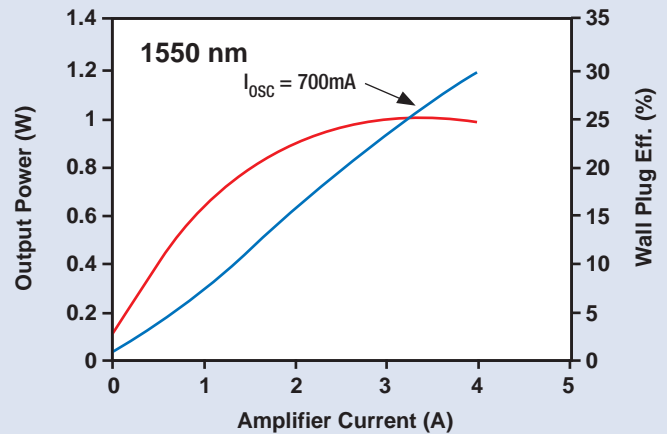
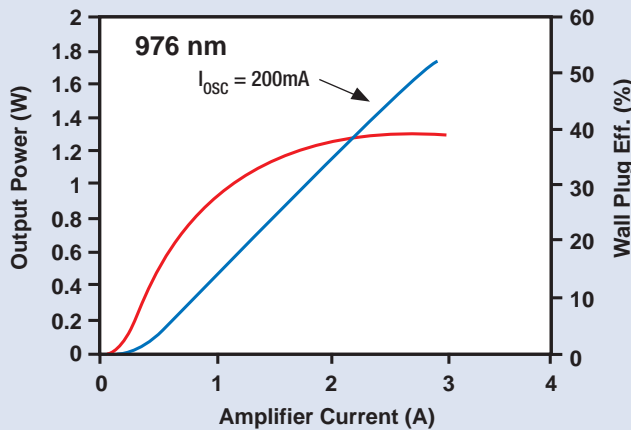
- 1.5 W, 976 nm single transverse mode
- 1.5W, 1040 nm single frequency and single transverse mode
- 1 W, 1550 nm single frequency and single transverse mode

## Benefits

- High power and high brightness enables direct diode replacement of CW solid state lasers
- High power and high brightness enables excellent frequency doubling efficiency
- Longer working distance, simpler optical design
- High power reduces number of system components and amplifiers

PART NO.	ES-104	ES-177	ES-102
Center Wavelength	976 nm	1040 nm	1550 nm
Center Wavelength Tolerance	+/- 5 nm	+/- 5 nm	+/- 5 nm
Spectral width (FWHM)	< 5.0 nm	< 0.1 nm	< 0.1 nm
Operating power	1.5 W	1.5 W	1 W
Emitter width at facet	250 microns	250 microns	250 microns
Operating current Amp section	< 2.8 A	< 2.8 A	< 4.0 A
Operating current Osc section	< 0.2 A	< 0.2 A	< 0.7 A
Voltage Amp section	< 1.5 V	< 1.5 V	< 1.5 V
Voltage Osc section	< 1.7 V	< 1.7 V	< 3.5 V
Conversion eff.	> 35%	> 35%	> 15%
Wavelength temperature coefficient	0.28 nm/C	0.08 nm/C	0.13 nm/C
Beam divergence, slow axis, FWHM	< 40 degrees	< 40 degrees	< 20 degrees
Beam divergence, fast axis, FWHM	< 40 degrees	< 40 degrees	< 35 degrees
Astigmatism	360 microns	360 microns	470 microns
Polarization	TE	TE	TE
Bonding Configuration	N-side to carrier	N-side to carrier	N-side to carrier

Operating conditions at 20 degrees Celsius unless otherwise noted



## BRIGHTNESS and POWER

Breaking Performance Barriers through Semiconductor Laser Innovation

last updated  
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光技術をサポートする

株式会社オプトサイエンス

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