# intense

### next generation lasers

## INFRA-RED LASER ENGINE Power Core 808



## Very High Brightness, Single Emitter Laser Engine for Industrial and Coding Applications

The Power Core 808 are innovative single emitter diode lasers that deliver very high brightness and high reliability in small, easyto-integrate, chip-level devices.

The most flexible laser platform in the industry, the unique design combines a small emitting aperture ( $90\mu$ m) with low beam divergence to produce very high brightness. The small

form factor allows it to be easily integrated into a variety of package types, including C-Mount, and fiber-coupled MFP and HHL.

The Power Core 808 is capable of up to 4 W of output power at 808 nm. It is designed for use in demanding industrial and coding applications, including pumping and sensor-based instrumentation.

#### Typical Specifications @ 25°C

Power Core		808
Measured Parameters		
Output Power, ex facet	W	4.0
Output Power, ex fiber	W	3.5 (Nominal)
Operating Current	Α	4.2
Wavelength		808 nm ±10 nm
Case Temperature	top	25° C
Typical Parameters		
Operating Voltage	Vmax	2.0 V
Spectral Width		4.0 nm
Threshold Current	lth	0.5 A
Slope Efficiency Laser	SE	1.1 W/A
Series Resistance	Rs	100 mΩ
Source Size (chip)		100 m
Fibert Core Size		105 µm
Fiber NA		0.22 (0.15 upon request)
Output NA		< 0.16
Parallel Divergence (chip)		<7 deg (FWHM)
Perpendicular Divergence (chip)		<25 deg (FWHM)
Package types		C-mount, HHL, HHLF, MFP (other available upon request)

Disclaimer

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