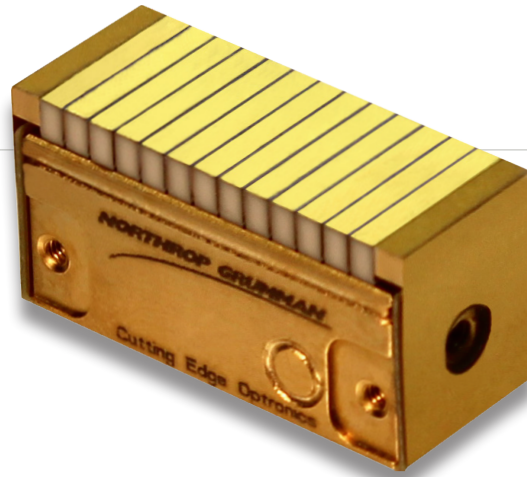


PART NUMBER: ARR291P1800  
12-BAR H PACKAGE

> **FEATURES AND BENEFITS**



- Assembled With Hard Solder & Expansion Matched Materials
- Small, Compact Design
- Filtered (non-DI) water cooled
- Ideal For Direct Diode Applications (e.g. hair removal, plastic welding)
- Available Wavelengths: 790-1550nm
- Multi-wavelength Configurations Available

> **OPTICAL CHARACTERISTICS**

Parameter	Conditions	Typical	Units
QCW Power Output	25A at 25°C Heat Sink	1800	W
Operating Current	1800W at 25°C Heat Sink	140	A
Threshold Current	25°C Heat Sink	< 25	A
Slope Efficiency	25°C Heat Sink	15	W/A
Electrical-Optical Efficiency	1800W at 25°C Heat Sink	55	%
Center Wavelength	1800W at 25°C Heat Sink	808	nm
Wavelength Tolerance	1800W at 25°C Heat Sink	±10	nm
Wavelength Shift	—	0.25	nm/°C
Beam Divergence FWHM	—	38x7	x°
Beam Divergence FWHM (Lensed)	—	1x7	x°

> **ELECTRICAL CHARACTERISTICS**

Parameter	Conditions	Typical	Units
Series Resistance	25°C Heat Sink	0.036	Ω
Operating Voltage	25°C Heat Sink, 1800W	24	V

> **ABSOLUTE MAXIMUM RATINGS**

Parameter	Conditions
Reverse Current	0 A
Reverse Voltage	0 V
Operating Temperature Range	-40°C to 70°C
Storage Temperature Range	-40°C to 85°C

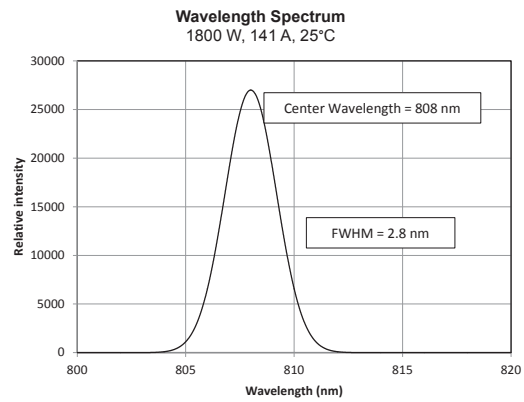
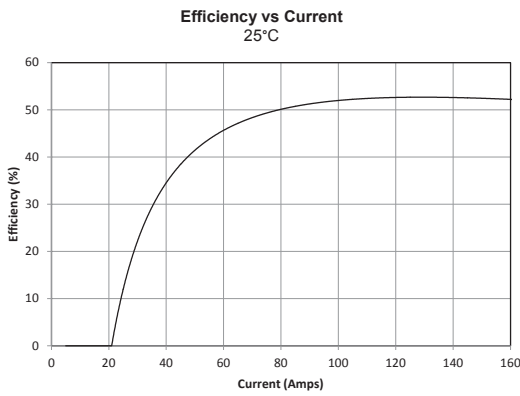
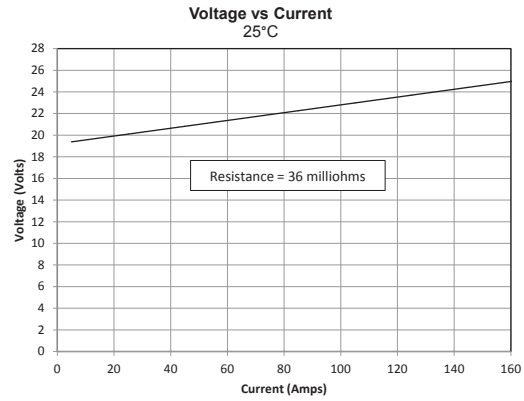
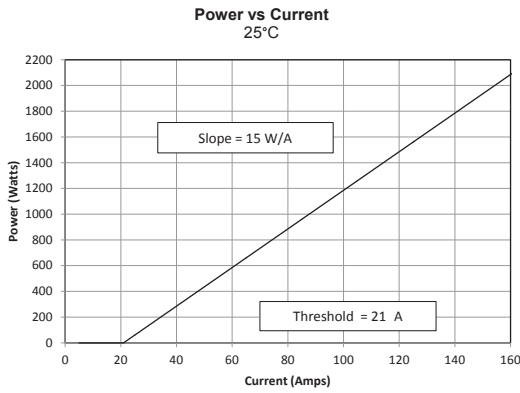
> **NOTES**

- (1) These specifications apply for operation at 808nm. Other wavelengths available upon request.
- (2) A dry nitrogen environment should be provided by the user when storing and operating at temperatures below ambient dew point.
- (3) Fast axis and slow axis lensing options are available for most NG-CEO heat exchanger designs.
- (4) Minimum required flow rate is 0.5 gpm (1.9 liters/minute). Typical pressure drop is 15 psi.

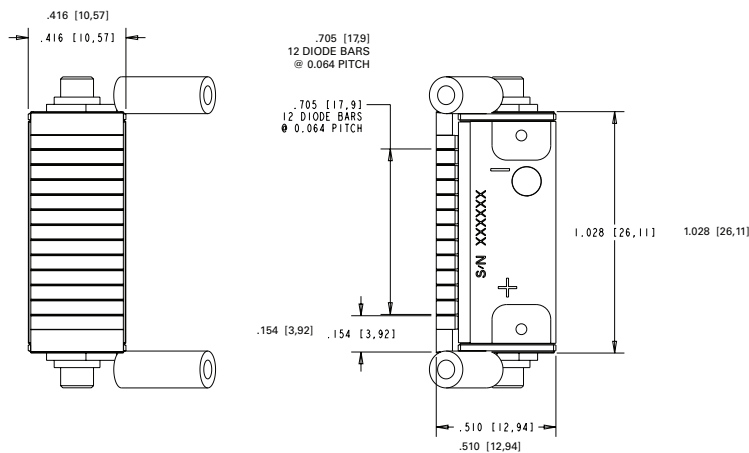
# 1800W CW

# H PACKAGE

## OPTICAL CHARACTERISTICS (SAMPLE)



## MECHANICAL CHARACTERISTICS



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**DANGER**

**INVISIBLE LASER RADIATION**

AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION.

\* **Diode laser**  
5W & up, 790-1560nm  
CLASS IV

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**WARNING**

ELECTROSTATIC DISCHARGE SENSITIVE DEVICE  
REQUIRING SPECIAL HANDLING

ISO 9001:2008 REGISTERED  
Rev. A 10/15  
15-2156