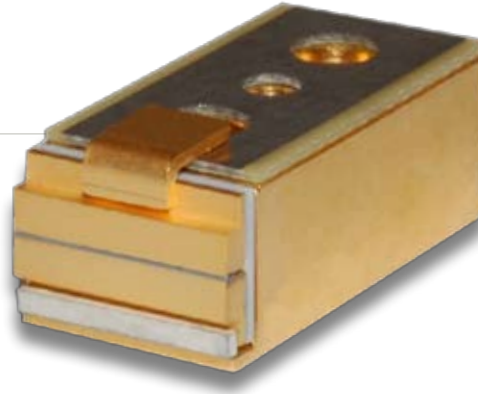


PART NUMBER: ARR189P200  
1-BAR A PACKAGE

### FEATURES AND BENEFITS



- Assembled With Hard Solder & Expansion Matched Materials
- Ideal For Long Pulse And/Or High Duty Cycle Applications
- Standard Bar Pitch Options Include 400  $\mu\text{m}$ , 800  $\mu\text{m}$ , & 1200  $\mu\text{m}$
- Available Wavelengths: 790-1550nm
- Multi-wavelength Configurations Available
- A Package Also Available With Up To 8 Bars For A Maximum Output Power Of 1.6 kW

### OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
QCW Power Output	175A at 25°C Heat Sink	200	W
Operating Current	200W at 25°C Heat Sink	175	A
Threshold Current	25°C Heat Sink	15	A
Slope Efficiency	25°C Heat Sink	1.25	W/A
Electrical-Optical Efficiency	200W at 25°C Heat Sink	57	%
Center Wavelength	200W at 25°C Heat Sink	808	nm
Wavelength Tolerance	200W at 25°C Heat Sink	+/-3	nm
Spectral Width	200W at 25°C Heat Sink	3.0	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	0.002	$\Omega$
Operating Voltage	25°C Heat Sink, 200W	2.0	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

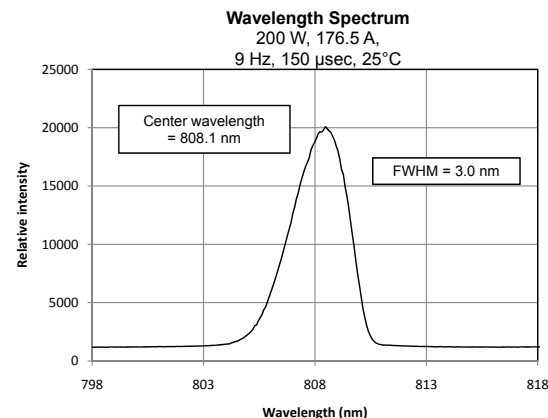
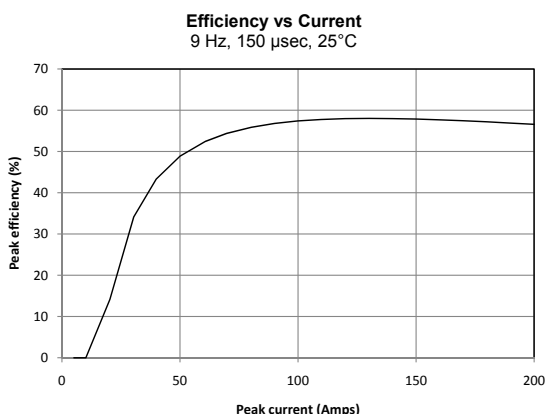
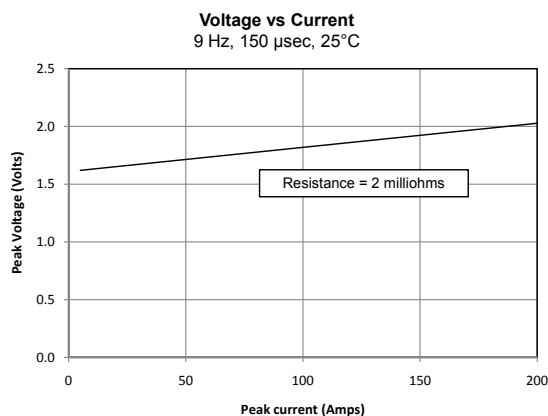
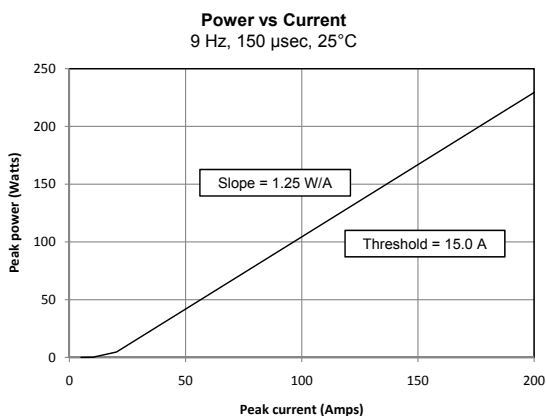
### NOTES

- (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.

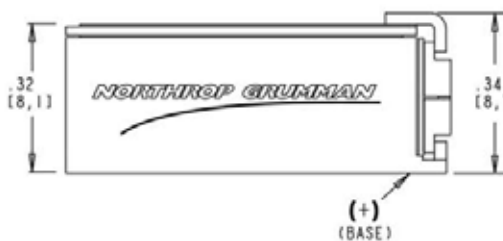
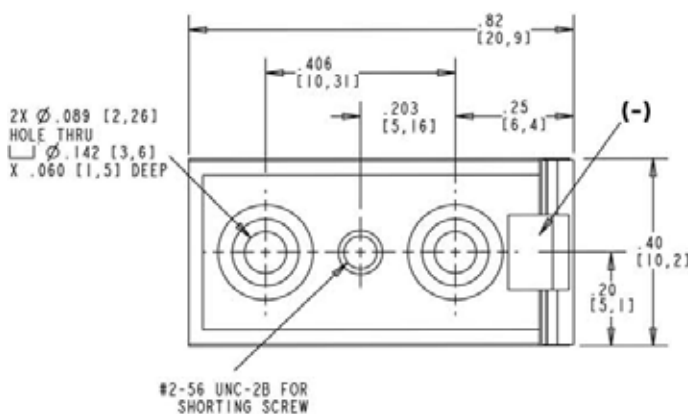
## 200W QCW

**NORTHROP GRUMMAN**

### 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, 780-1560nm  
CLASS IV

**WARNING**

ELECTROSTATIC DISCHARGE SENSITIVE DEVICE  
REQUIRING SPECIAL HANDLING

REV. A 10/09