

PART NUMBER: ARR179P800
8-BAR G 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 μm , 800 μm , & 1200 μm
- Available Wavelengths: 790-1550nm
- Multi-wavelength Configurations Available
- G Package Also Available With Up To 26 Bars For A Maximum Output Power Of 5.2 kW

OPTICAL CHARACTERISTICS

| Parameter | Conditions | Typical | Units |
|-------------------------------|------------------------|---------|-------|
| QCW Power Output | 95A at 25°C Heat Sink | 800 | W |
| Operating Current | 800W at 25°C Heat Sink | 95 | A |
| Threshold Current | 25°C Heat Sink | 15 | A |
| Slope Efficiency | 25°C Heat Sink | 10.0 | W/A |
| Electrical-Optical Efficiency | 800W at 25°C Heat Sink | 58 | % |
| Center Wavelength | 800W at 25°C Heat Sink | 808 | nm |
| Wavelength Tolerance | 800W at 25°C Heat Sink | +/-3 | nm |
| Spectral Width | 800W at 25°C Heat Sink | 2.0 | 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 | 0.016 | Ω |
| Operating Voltage | 25°C Heat Sink, 800W | 14.4 | V |

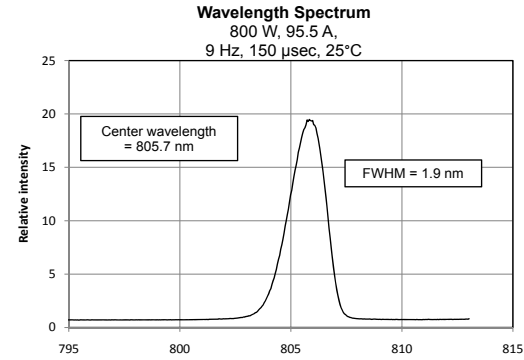
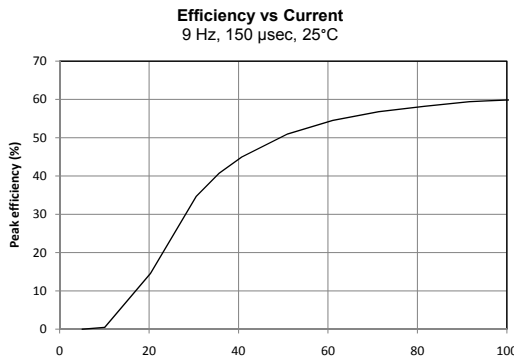
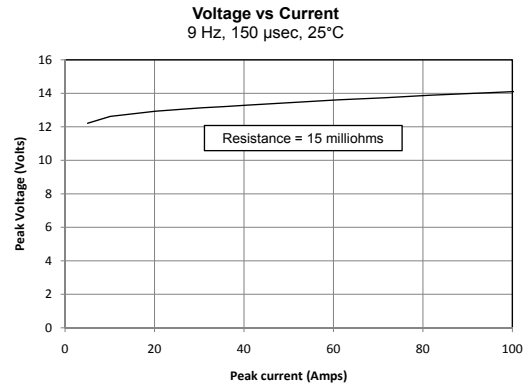
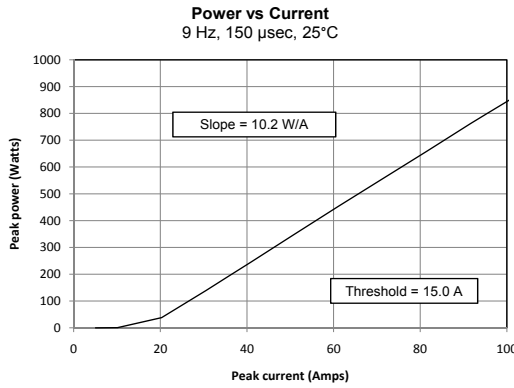
ABSOLUTE MAXIMUM RATINGS

| 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 |

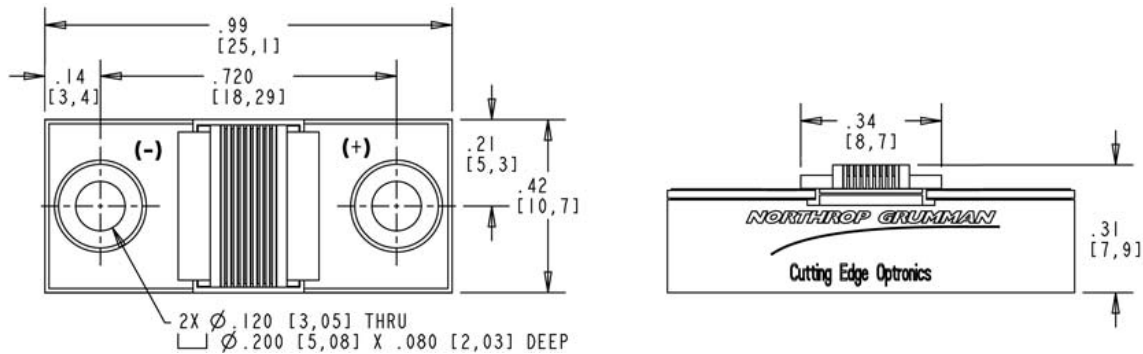
NOTES

- (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.

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