

PART NUMBER: ARR186P1600
16-BAR AA 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
- AA Package Available With Up To 16 Bars For A Maximum Output Power Of 3.2 kW

OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
QCW Power Output	95A at 25°C Heat Sink	1600	W
Operating Current	1600W at 25°C Heat Sink	95	A
Threshold Current	25°C Heat Sink	15	A
Slope Efficiency	25°C Heat Sink	20.0	W/A
Electrical-Optical Efficiency	1600W at 25°C Heat Sink	58	%
Center Wavelength	1600W at 25°C Heat Sink	808	nm
Wavelength Tolerance	1600W at 25°C Heat Sink	+/-3	nm
Spectral Width	1600W at 25°C Heat Sink	2.5	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	0.032	Ω
Operating Voltage	25°C Heat Sink, 1600W	28.8	V

ABSOLUTE MAXIMUM RATINGS

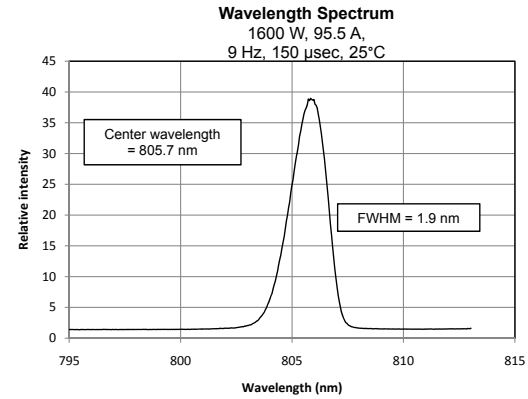
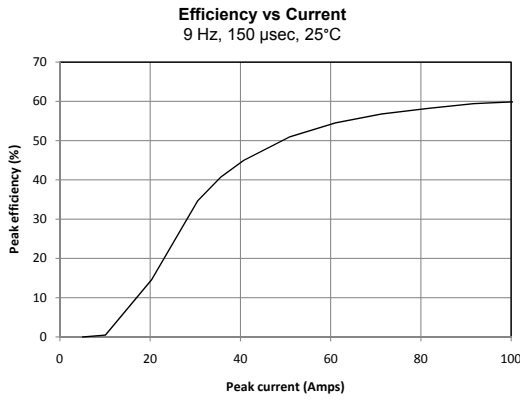
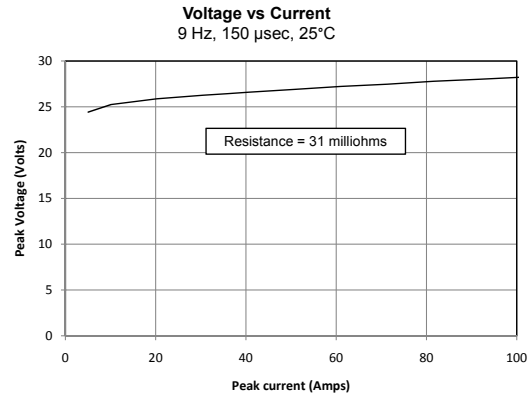
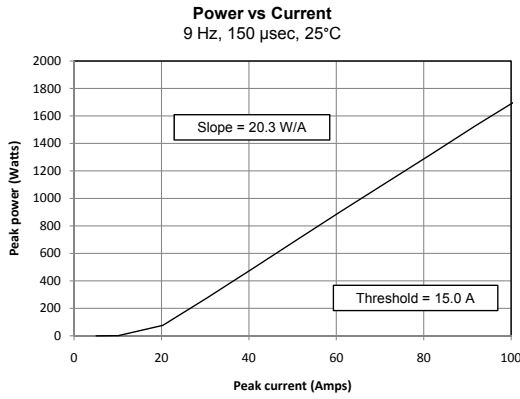
Parameter	Conditions
Reverse Current	0 A
Reverse Voltage	0 V
Operating Temperature Range	-40°C to 70°C
Storage Temperature Range	-40°C to 85°C

NOTES

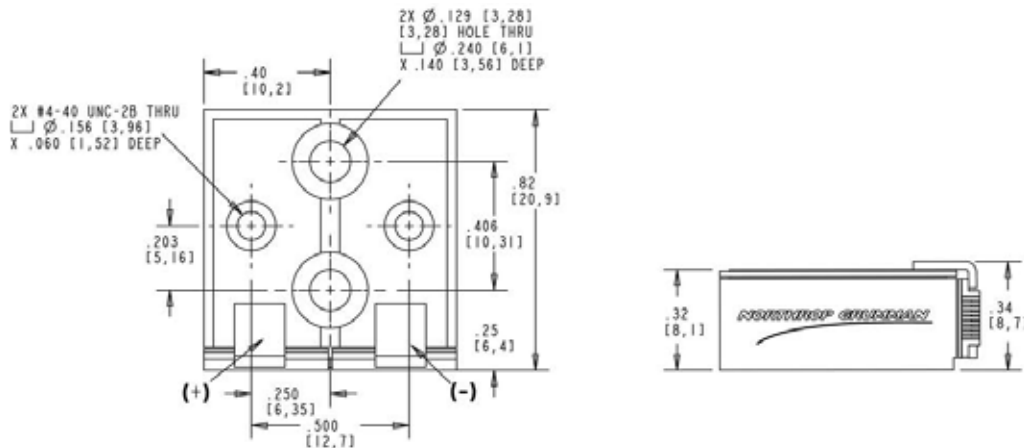
- (1) These specifications apply for operation at 808nm. Other wavelengths available upon request.
- (2) A dry nitrogen environment should be provided by the user when storing and operating at temperatures below ambient dew point.
- (3) Fast axis and slow axis lensing options are available for most NG-CEO heat exchanger designs.

1600W QCW

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