# G PACKAGE

## **1000W QCW**

#### NORTHROP GRUMMAN



PART NUMBER: ARR180P1000 10-BAR STRETCH G PACKAGE

- 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

**FEATURES AND BENEFITS** 

Parameter	Conditions	Typical	Units
QCW Power Output	95A at 25°C Heat Sink	1000	W
Operating Current	1000W at 25°C Heat Sink	95	Α
Threshold Current	25°C Heat Sink	15	А
Slope Efficiency	25°C Heat Sink	12.5	W/A
Electrical-Optical Efficiency	1000W at 25°C Heat Sink	58	%
Center Wavelength	1000W at 25°C Heat Sink	808	nm
Wavelength Tolerance	1000W at 25°C Heat Sink	+/-3	nm
Spectral Width	1000W 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	0.020	Ω
Operating Voltage	25°C Heat Sink, 1000W	18.0	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

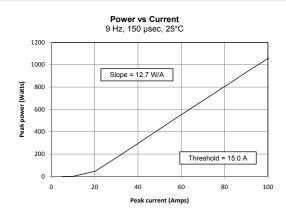
#### NOTES

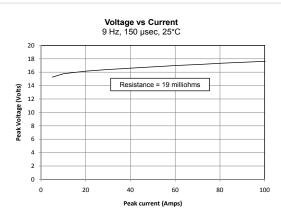
- (1) These specifications apply for operation at 808nm. Other wavelengths available upon request.
- (2) A dry nitrogen environment should be provided by the user when storing and operating at temperatures below ambient dew point.
- (3) Fast axis and slow axis lensing options are available for most NG-CEO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

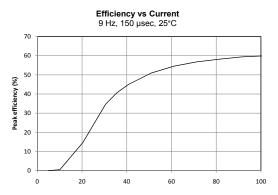
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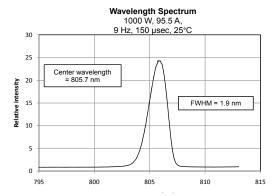
### **1000W QCW**

#### **OPTICAL CHARACTERISTICS (SAMPLE)**

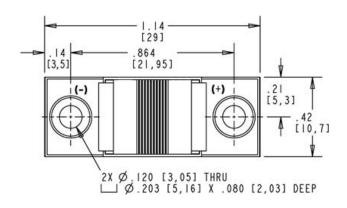


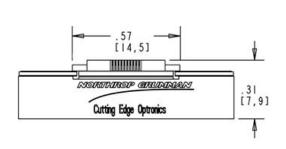






#### **MECHANICAL CHARACTERISTICS**





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