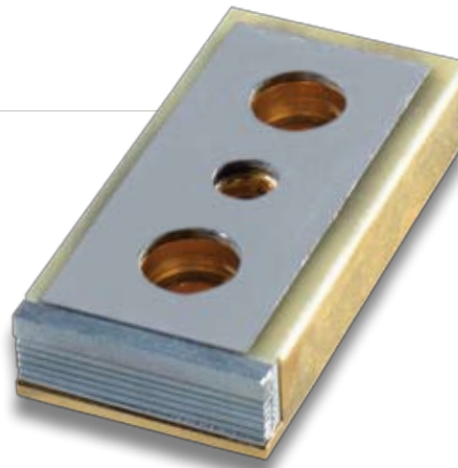


PART NUMBER: ARR73C020  
A PACKAGE

## &gt; FEATURES AND BENEFITS



- Conductively Cooled
- Small, Compact Design
- Ideal For Side Pumping Or Direct Diode Applications
- Available Wavelengths (790-1550nm)

## &gt; OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
CW Power Output	25A at 25°C Heat Sink	20	W
Operating Current	20W at 25°C Heat Sink	25	A
Threshold Current	25°C Heat Sink	8	A
Slope Efficiency	25°C Heat Sink	1.15	W/A
Electrical-Optical Efficiency	20W at 25°C Heat Sink	47	%
Center Wavelength	20W at 25°C Heat Sink	808	nm
Wavelength Tolerance	20W at 25°C Heat Sink	+/-3	nm
Spectral Width	20W at 25°C Heat Sink	1.8	nm
Wavelength Shift	—	0.25	nm/°C
Beam Divergence FWHM	—	38x7	x°
Beam Divergence FWHM (Lensed)	—	1x7	x°

## &gt; ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
Series Resistance	25°C Heat Sink	0.004	Ω
Operating Voltage	25°C Heat Sink, 20W	1.7	V

## &gt; ABSOLUTE MAXIMUM RATINGS

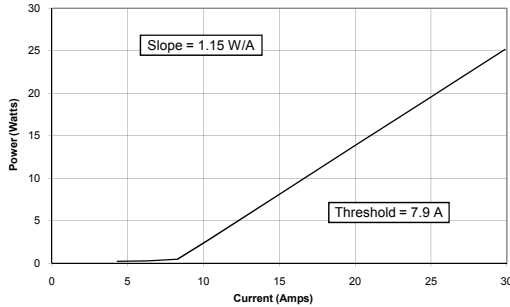
Parameter	Conditions
Reverse Current	0 A
Reverse Voltage	0 V
Operating Temperature Range	-40°C to 70°C
Storage Temperature Range	-40°C to 85°C

## &gt; NOTES

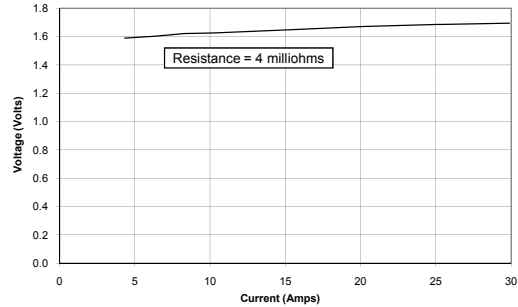
- (1) These specifications apply for operation at 808nm. Other wavelengths available upon request.
- (2) A dry nitrogen environment should be provided by the user when storing and operating at temperatures below ambient dew point.
- (3) Fast axis and slow axis lensing options are available for most NG-CEO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

OPTICAL CHARACTERISTICS (SAMPLE)

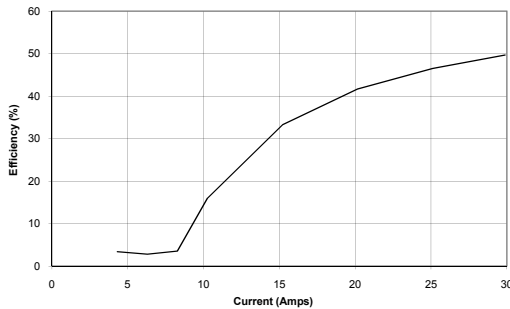
Power vs Current  
25°C



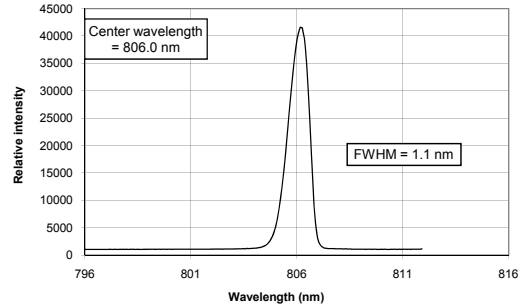
Voltage vs Current  
25°C



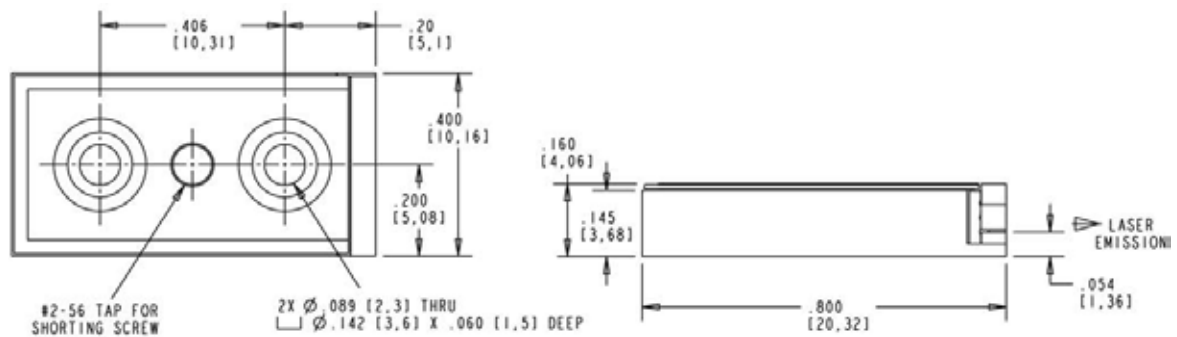
Efficiency vs Current  
25°C



Wavelength Spectrum  
20.0 W, 25.4 A, 25°C



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