



PART NUMBER: ARR187C040  
2-BAR Cs PACKAGE

#### FEATURES AND BENEFITS

- Assembled With Hard Solder & Expansion Matched Materials
- Low Smile Package Design
- Conductively Cooled
- Industry Standard
- 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

#### OPTICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
CW Power Output	25A at 25°C Heat Sink	40	W
Operating Current	40W at 25°C Heat Sink	25	A
Threshold Current	25°C Heat Sink	8	A
Slope Efficiency	25°C Heat Sink	2.30	W/A
Electrical-Optical Efficiency	40W at 25°C Heat Sink	47	%
Center Wavelength	40W at 25°C Heat Sink	792	nm
Wavelength Tolerance	40W at 25°C Heat Sink	+/-3	nm
Spectral Width	40W 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°

#### ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Units
Series Resistance	25°C Heat Sink	0.008	$\Omega$
Operating Voltage	25°C Heat Sink, 40W	3.4	V

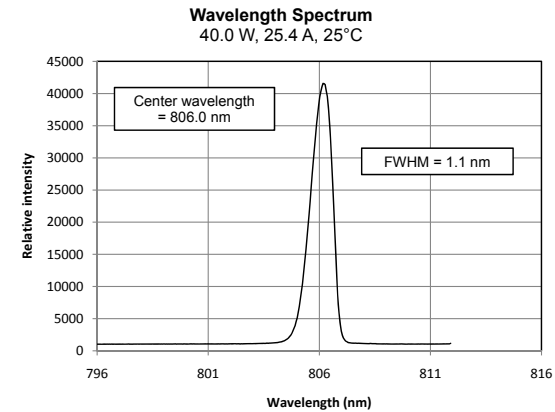
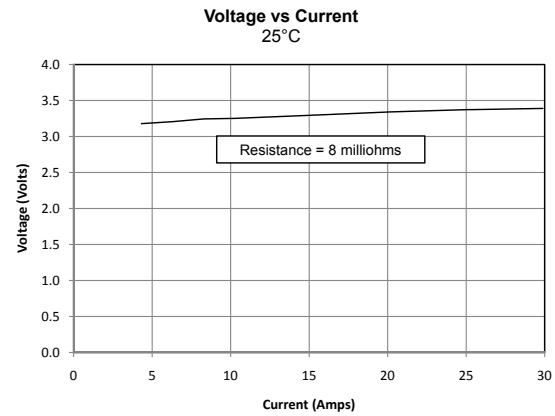
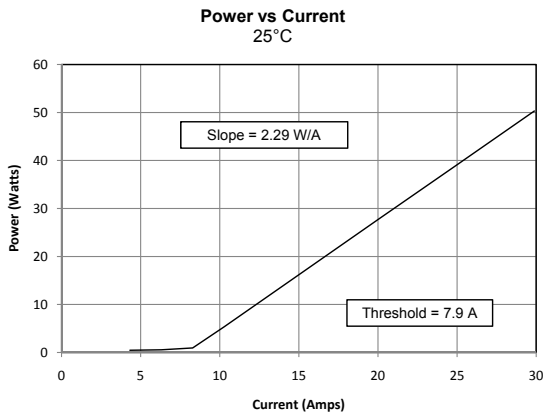
#### ABSOLUTE MAXIMUM RATINGS

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

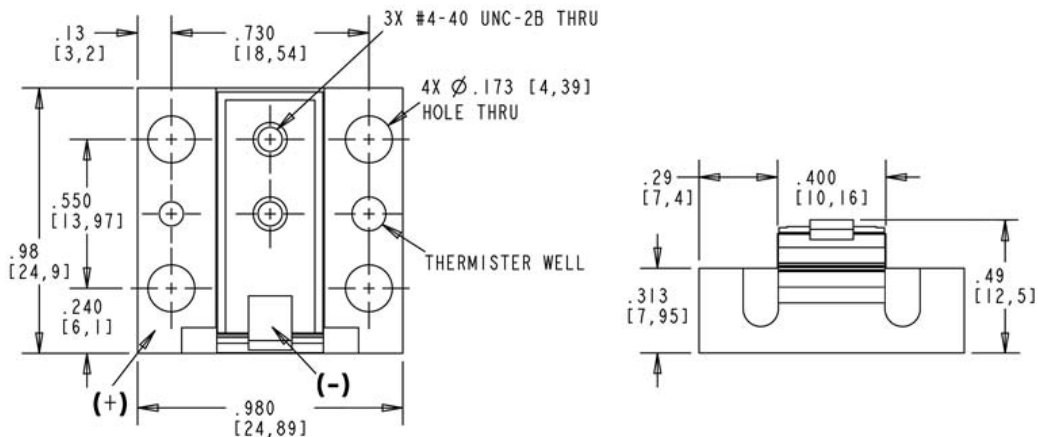
#### NOTES

- (1) These specifications apply for operation at 792nm. 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