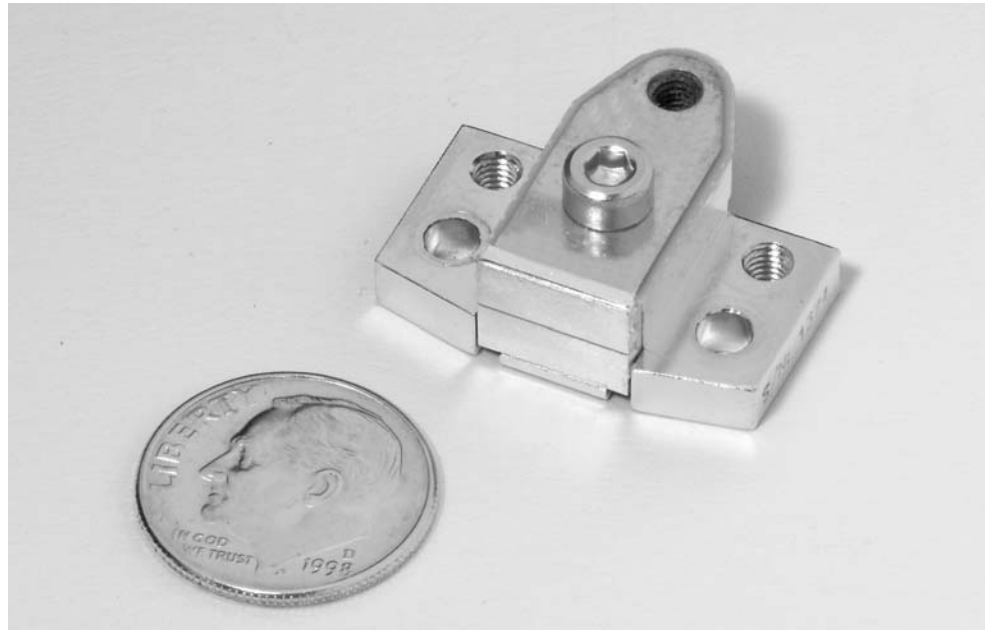


# 20W CW Laser Diode Array

Part Number: ARR31C020

## W2 PACKAGE

- Packaged Laser Diode Array
- Available With Any Silver Bullet™ Configuration
- Silver Bullet™ Can Be Mounted P-Side Up Or P-Side Down
- Available Wavelengths 790-1550nm



## OPTICAL CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
CW Power Output	32A at 25°C Heat Sink	20	---	---	W
Operating Current	20W at 25°C Heat Sink	---	28	30	A
Threshold Current	25°C Heat Sink	---	7.5	9.0	A
Center Wavelength	20W at 25°C Heat Sink	---	808	---	nm
Wavelength Tolerance	20W at 25°C Heat Sink	---	± 3	---	nm
Spectral Width FWHM	20W at 25°C Heat Sink	---	1.9	2.5	nm
Wavelength Shift	---	0.23	0.25	0.27	nm/°C
Beam Divergence FWHM	---	---	40x10	42x12	° x °

## ELECTRICAL CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Series Resistance	25°C Heat Sink	---	0.005	0.012	ohms
Operating Voltage	25°C Heat Sink, 20W	---	1.8	2.1	V

## ABSOLUTE MAXIMUM RATINGS

PARAMETER	CONDITIONS
Forward Current	35A
Reverse Current	25µA
Reverse Voltage	3V
Operating Temperature Range <sup>(2)</sup>	-20°C to 50°C
Storage Temperature Range	-40°C to 85°C

### NOTES

- (1) These specifications apply for operations 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.

**NORTHROP GRUMMAN**

*Space Technology*

Cutting Edge Optonics

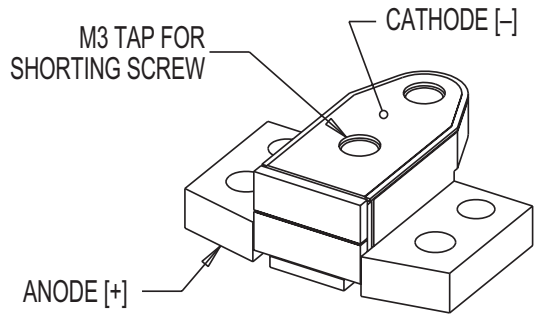
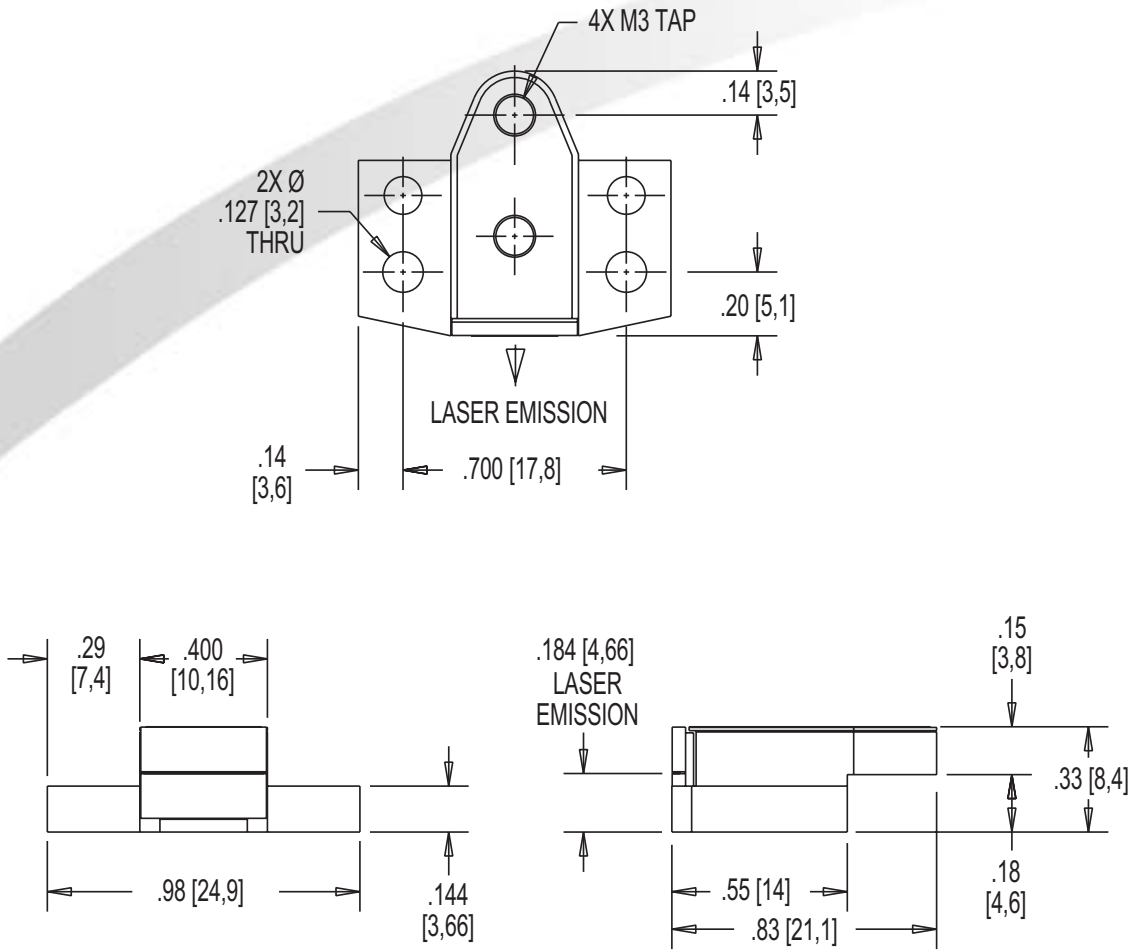


光技術をサポートする  
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# MECHANICAL CHARACTERISTICS



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This Product is covered by one or more of the following Patents: 5,898,211 5,985,684 5,913,108 6,310,900 Other US and Foreign Patents Pending.

Laser diode product components are intended for use in a user-devised end system. However, these products are capable of emitting Class IV radiation. Extreme care must be exercised during their operation. Only persons familiar with the appropriate safety precautions should operate a laser product. Directly viewing the laser beam or exposure to specular reflections must be avoided. Serious injury may result if any part of the body is exposed to the beam. The eye is extremely sensitive to the infrared radiation and therefore, proper eyewear must be worn at all times. Use of optical instruments with these products may increase eye hazard. Always wear proper eye protection when operating.

**⚠ DANGER ⚠**

INVISIBLE LASER RADIATION  
 AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION

\* Diode laser  
 5W & up, 790-1560nm  
 CLASS IV

**⚠ WARNING ⚠**

ELECTROSTATIC DISCHARGE SENSITIVE DEVICE  
 REQUIRING SPECIAL HANDLING

Rev B 02/04



Cutting Edge Optronics

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