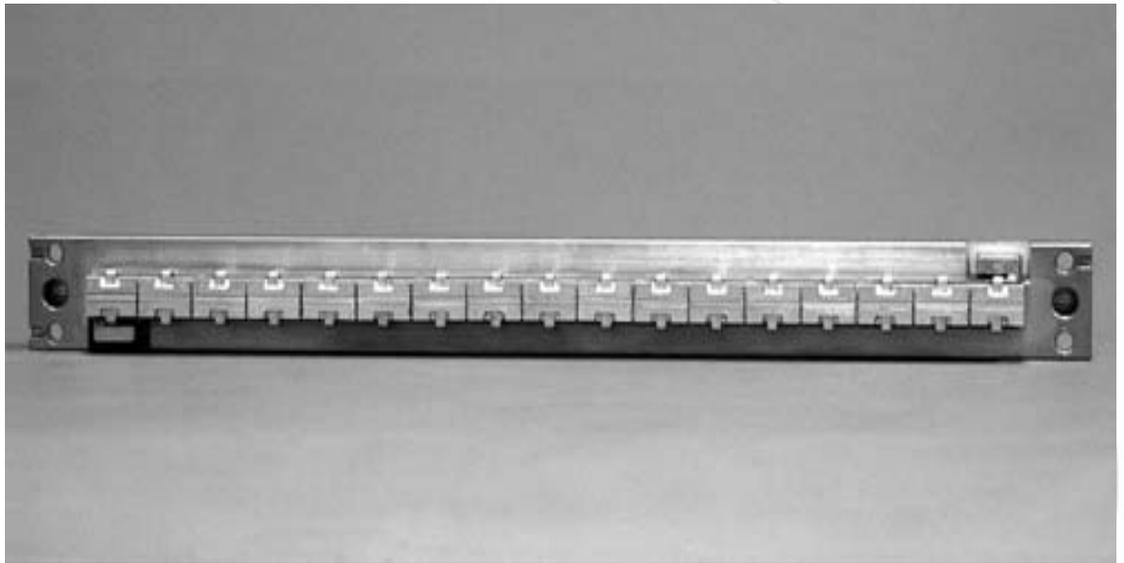


# 680W CW Laser Diode Array

## Part Number: ARR87C680

- Packaged Laser Diode Array
- Available With Any Silver Bullet™ Configuration
- Available Wavelengths (790-1550nm)



### OPTICAL CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
CW Power Output	30A at 25°C Heat Sink	680	---	---	W
Operating Current	680W at 25°C Heat Sink	---	28	32	A
Threshold Current	25°C Heat Sink	---	7.5	9.0	A
Efficiency	680W at 25°C Heat Sink	35	42	---	%
Center Wavelength	680W at 25°C Heat Sink	---	808	---	nm
Wavelength Tolerance	680W at 25°C Heat Sink	---	± 3	---	nm
Spectral Width FWHM	680W at 25°C Heat Sink	---	3.0	---	nm
Wavelength Shift	---	---	0.25	---	nm/°C
Beam Divergence FWHM	---	---	40x10	42x12	° x °

### ELECTRICAL CHARACTERISTICS

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Series Resistance	25°C Coolant	---	0.085	0.204	ohms
Operating Voltage	25°C Coolant, 680W	---	61.2	71.4	V

### ABSOLUTE MAXIMUM RATINGS

PARAMETER	CONDITIONS
Operating Temperature Range <sup>(2)</sup>	-20°C or to 50°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.

**NORTHROP GRUMMAN**  
Space Technology

Cutting Edge Optronics

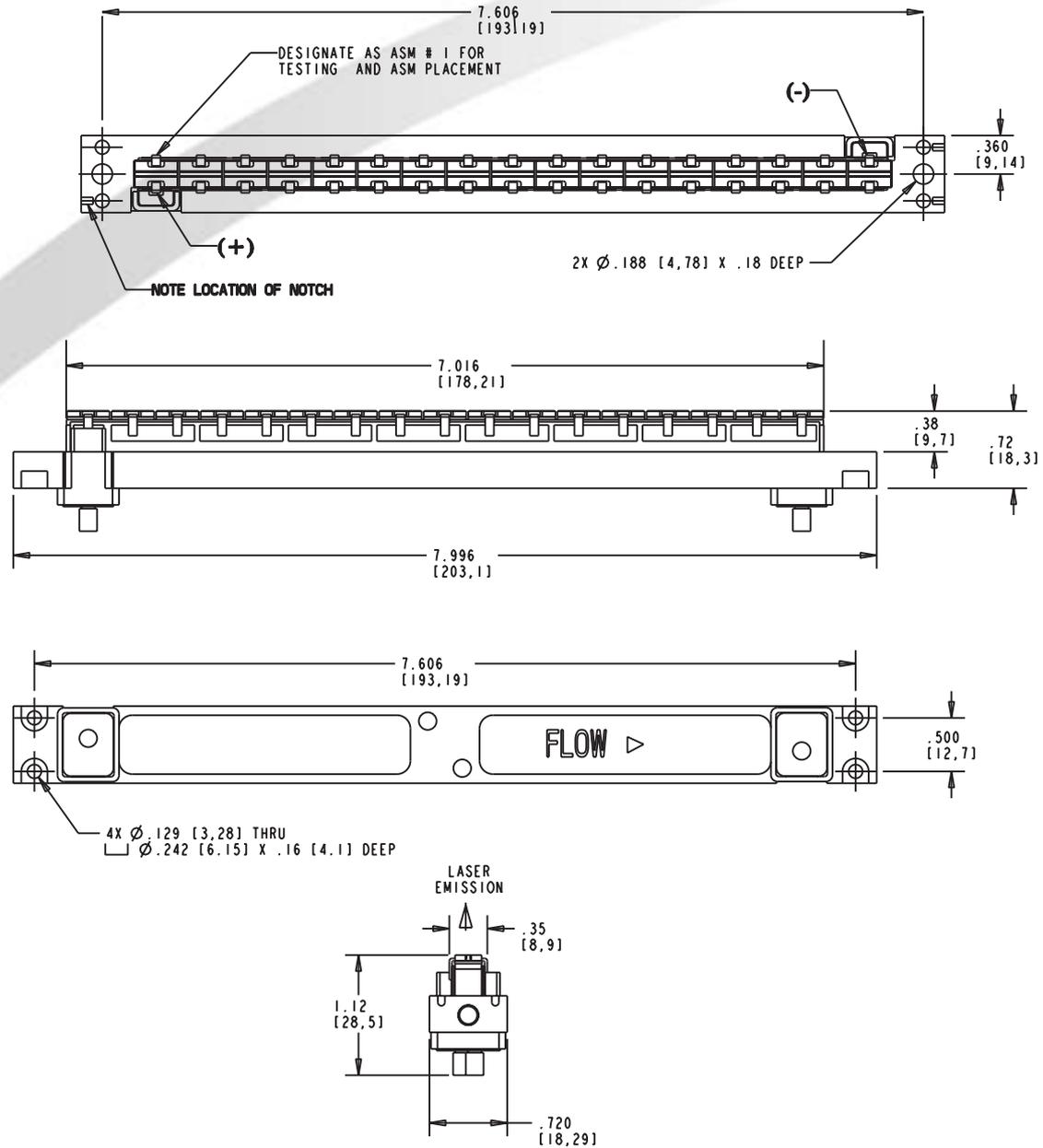


光技術をサポートする  
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# MECHANICAL CHARACTERISTICS



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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 A 02/04