# element® e18

### **Fiber-Coupled Semiconductor Laser**



### 135W, 793nm, 200μm

135W, 793nm, 200µm			Item Number: 1087338	
	Unit	Minimum	Typical	Maximum
Optical Specifications				
CW Output Power (in fiber) 4	W	124	135	
Wavelength Centroid	nm	790.0	793.0	796.0
Spectral Width (FWHM)	nm		1.9	4.0
NA within 95% Power Enclosure	-		0.16	
Fiber Core / Clad Diameter	μm		200 / 220	
Fiber NA / Index Type / Cladding Type	-	0.22 NA / Step Index / Dual Clad		
Back Reflection Isolation 1850 - 2100nm	dB	15		
Electrical Specifications				
Electrical-to-Optical Efficiency	%		43	
Threshold Current	А		2.0	
Operating Current	А		10.0	10.0
Operating Voltage	V		31.6	32.5
Thermal Specifications				
Operating (Housing) Temperature <sup>3</sup>	°C		+30	
Storage Temperature <sup>3</sup>	°C	-25		70
Wavelength Temperature Coefficient	nm / °C		0.28	
Wavelength Current Coefficient	nm / A		0.6	
Mechanical Specifications				
Mass	g		510	
Fiber Length	m	1.5	2.0	
Active Fiber Bend Radius	mm	35		
Product Information				
Item Description	-	e18-18-135-0793-3-200-0.22-SI-FPT-2.0-HT		
Fiber Jacketing	-	900 μm Hytrel Tubing		
Fiber Termination	-	FPT		
Export Control Classification Number (ECCN)	-		EAR99	

#### Notes

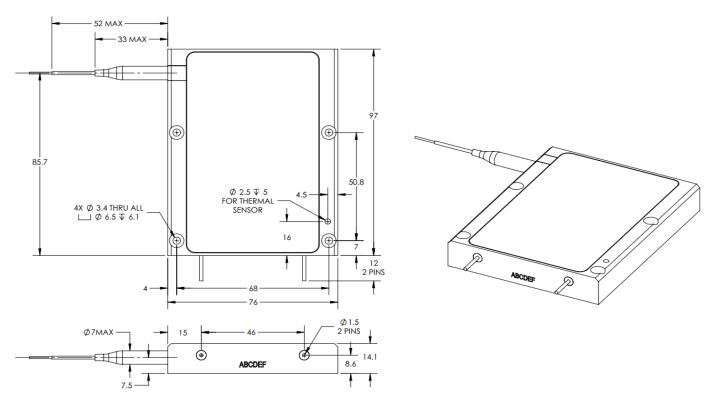
- ${\small 1\ \ Product\ image\ not\ necessarily\ representative\ of\ exact\ appearance.}\\$
- 2 Production specifications shown are for beginning of life performance at the typical operating temperature. End of life operating current (lop) is 110% beginning of life lop.
- 3 A non-condensing environment with relative humidity between 5 85% is required for operation and storage.
- 4 The CW Output Power (in-fiber) specified is 3.5% higher than the as-measured values to account for Fresnel loss that wouldn't be present in the intended spliced use condition.



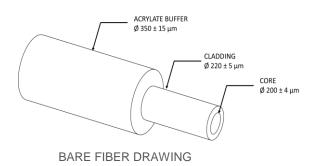
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### 900 µm Hytrel Tubing Bare fiber pigtail

#### **Mechanical Drawings**



ALL DIMENSIONS IN mm WITH ±0.25mm TOLERANCE.







Item Number: 1087338

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This product is not certified in accordance with IEC 60825-1 or 21CFR1040.10/21CFR1040.11 and is solely intended to be integrated into a laser product certified by the Purchaser. The Purchaser acknowledges that their product (incorporating nLIGHT laser product) must comply with the applicable regulations before it can be sold.

