element® e12

Fiber-Coupled Semiconductor Laser



Item Number: 1084539

85W, 808nm, 200µm

	Unit	Minimum	Typical	Maximum
Optical Specifications				
CW Output Power	W	76	85	
Wavelength Centroid	nm	805.0	808.0	811.0
Spectral Width (FWHM)	nm		1.8	4.0
NA within 95% Power Enclosure	-		0.14	
Fiber Core / Clad Diameter	μm		200 / 220	
Fiber NA / Index Type / Cladding Type	-	0.22 NA / Step Index / Dual Clad		
Back Reflection Isolation 1060 - 1200nm	dB	15		
Electrical Specifications				
Electrical-to-Optical Efficiency	%		41	
Threshold Current	А		2.0	
Operating Current	А		10.0	10.0
Operating Voltage	V		20.9	23.0
Thermal Specifications				
Operating (Housing) Temperature ³	°C		+30	
Storage Temperature ³	°C	-25		70
Wavelength Temperature Coefficient	nm / °C		0.28	
Wavelength Current Coefficient	nm / A		0.54	
Mechanical Specifications				
Mass	g		440	
Fiber Length	m	1.4	1.5	1.6
Active Fiber Bend Radius	mm	35		
Product Information				

Notes

Item Description
Fiber Jacketing

Fiber Termination

Product image not necessarily representative of exact appearance.

Export Control Classification Number (ECCN)

- 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.
- $3\ \ \text{A non-condensing environment with relative humidity between 5-85\% is required for operation and storage.}$
- 4 Export Control Classification Number (ECCN) as defined by the Export Administration Regulations (EAR).



e12-12-085-0808-3-200-0.22-SI-SMA-1.5-KL

3 mm Kevlar Reinforced Tubing

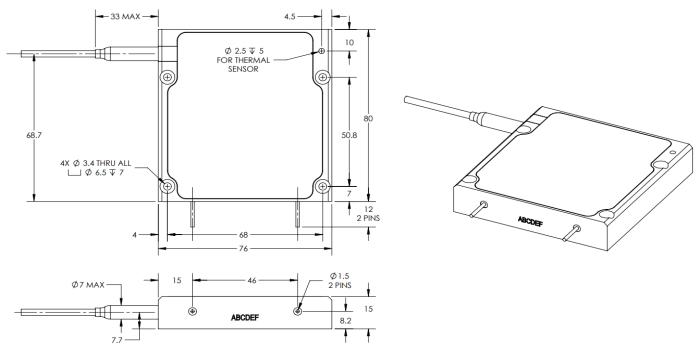
SMA

EAR99

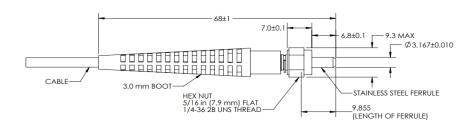
element e12

3 mm Kevlar Reinforced Tubing High Power SMA 905

Mechanical Drawings



ALL DIMENSIONS IN mm WITH ±0.25mm TOLERANCE.



SMA TERMINATION DRAWING





Item Number: 1084539

nLIGHT continually improves its products to provide customers outstanding quality and reliability. The information contained herein is subject to change without notice.

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.



