

# element<sup>®</sup> e09i

## Fiber-Coupled Semiconductor Laser



Item Number : 1156968

### 115W, 878.6nm, 200 $\mu$ m Wavelength Stabilized

	Unit	Minimum	Typical	Maximum
<b>Optical Specifications</b>				
CW Output Power	W		115	
Wavelength Peak	nm	877.6	878.6	879.6
Spectral Width (FWHM)	nm		0.3	1.0
NA within 95% Power Enclosure	-		0.18	
Fiber Core / Clad Diameter	$\mu$ m		200 / 220	
Fiber NA / Index Type / Cladding Type	-		0.22 NA / Step Index / Dual Clad	
Back Reflection Isolation 1060 - 1200nm	dB	15		
<b>Electrical Specifications</b>				
Electrical-to-Optical Efficiency	%		53	
Threshold Current	A		1.8	
Operating Current	A		15.0	16.6
Operating Voltage	V		14.6	15.6
Wavelength Stabilized Operating Current <sup>5</sup>	A	9.0		18.0
<b>Thermal Specifications</b>				
Operating (Housing) Temperature <sup>3</sup>	$^{\circ}$ C		+30	
Storage Temperature <sup>3</sup>	$^{\circ}$ C	-25		70
Wavelength Temperature Coefficient	nm / $^{\circ}$ C		0.01	
Wavelength Current Coefficient	nm / A		0.02	
<b>Mechanical Specifications</b>				
Mass	g		230	
Fiber Length	m	1.4	1.5	1.6
Active Fiber Bend Radius	mm	35		
<b>Product Information</b>				
Item Description	-	e09i-09-115-0878.6-1-200-0.22-SI-SMA-1.5-KL-VBG		
Fiber Jacketing	-	3 mm Kevlar Reinforced Tubing		
Fiber Termination	-	SMA		
Export Control Classification Number (ECCN)	-	EAR99		

#### Notes

- Product image not necessarily representative of exact appearance.
- Production specifications shown are for beginning of life performance at the typical operating temperature. End of life operating current (Iop) is 110% beginning of life Iop.
- A non-condensing environment with relative humidity between 5 - 85% is required for operation and storage.
- Export Control Classification Number (ECCN) as defined by the Export Administration Regulations (EAR).
- Wavelength stabilized to > 95% power in band of 877.1nm to 880.1nm at the rated operating temperature.

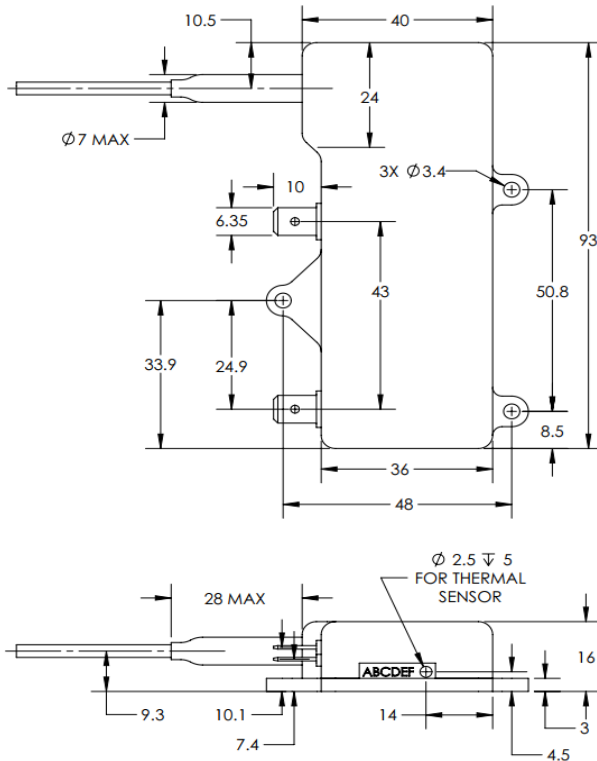
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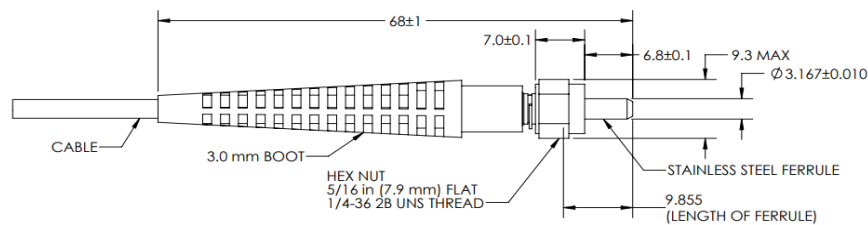
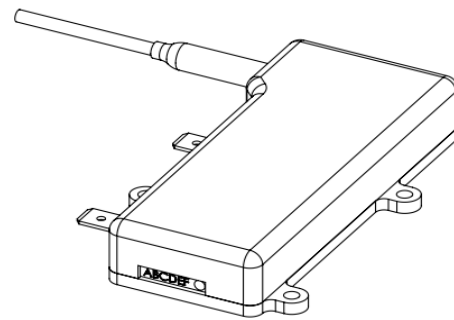
## 3 mm Kevlar Reinforced Tubing High Power SMA 905

Item Number : 1156968

### Mechanical Drawings



ALL DIMENSIONS IN mm WITH  $\pm 0.25$ mm TOLERANCE.



SMA TERMINATION DRAWING

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.



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Rev 7/18/2023

