

# element<sup>®</sup> e06i

## Fiber-Coupled Semiconductor Laser



### 90W, 878.6nm, 200 $\mu$ m Wavelength Stabilized

Item Number : 1130123

	Unit	Minimum	Typical	Maximum
<b>Optical Specifications</b>				
CW Output Power	W		90	
Wavelength Peak	nm	877.9	878.6	879.3
Spectral Width (FWHM)	nm		0.3	0.7
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	%		52	
Threshold Current	A		1.8	
Operating Current	A		17.6	19.0
Operating Voltage	V		9.8	10.8
Wavelength Stabilized Operating Current <sup>5</sup>	A	9.0		21.0
<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		165	
Fiber Length	m	1.4	1.5	1.6
Active Fiber Bend Radius	mm	35		
<b>Product Information</b>				
Item Description	-	e06i-06-090-0878.6-0.7-200-0.22-SI-SMA-1.5-KL-VBG		
Fiber Jacketing	-	3 mm Kevlar Reinforced Tubing		
Fiber Termination	-	SMA		
Export Control Classification Number (ECCN)	-	EAR99		

#### Notes

- 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 (Iop) is 110% beginning of life Iop.
- 3 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).
- 5 Wavelength stabilized to > 95% power in band of 877.1nm to 880.1nm at the rated operating temperature.

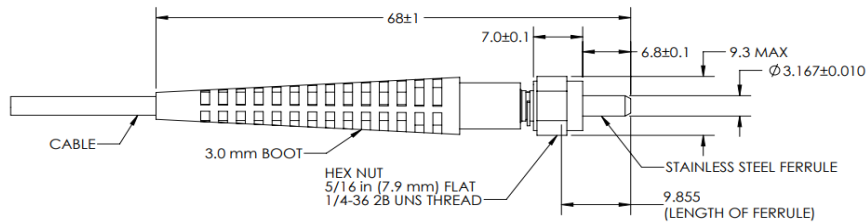
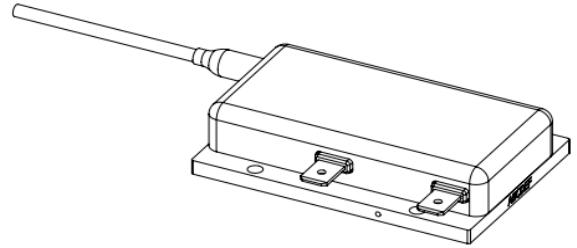
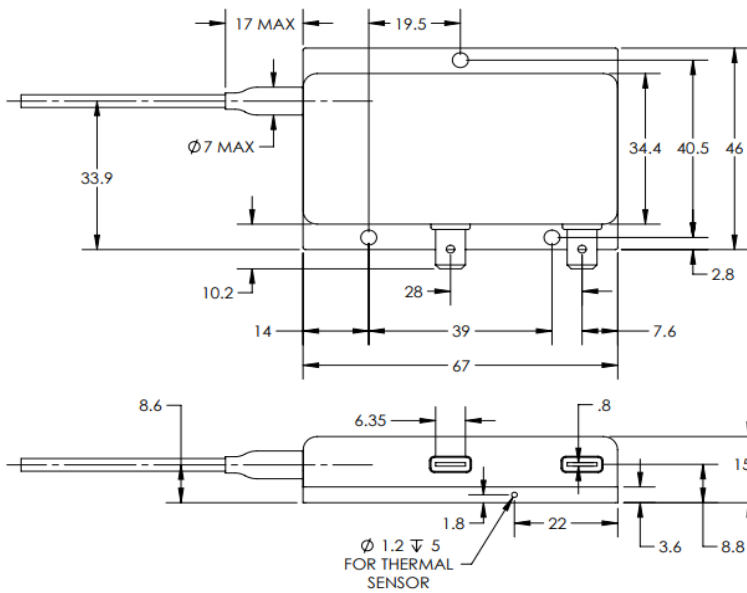
sales@nlight.net | www.nlight.net

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## 3 mm Kevlar Reinforced Tubing High Power SMA 905

Item Number : 1130123

### Mechanical Drawings



SMA TERMINATION DRAWING

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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.



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Rev 6/16/2023

