

Datasheet: Necsel™ Blue DE Laser

These specifications are for the Necsel blue direct emitting package. The centroid of the wavelength spectrum will be within the indicated wavelength range.



Model #	Symbol	Min. (nm)	Typical (nm)	Max. (nm)
Blue-DE-44x	λ	440	445	449

Operating Wavelengths

Laser Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Power (CW)	P_{op}	-	10.0	-	W
Module Operating Temperature [non-condensing atmosphere]	$T_{Thermistor}$	-	30	-	°C
Center Wavelength [at 25°C and P_{op}]	λ	440	445	449	nm
Wavelength Temperature Coefficient	-	-	-	0.1	nm/°C
Threshold Current	I_{th}	-	350	-	mA
Slope Efficiency	η	-	8.0	-	W/A
Laser Power Conversion Efficiency	PCE	-	28	-	%

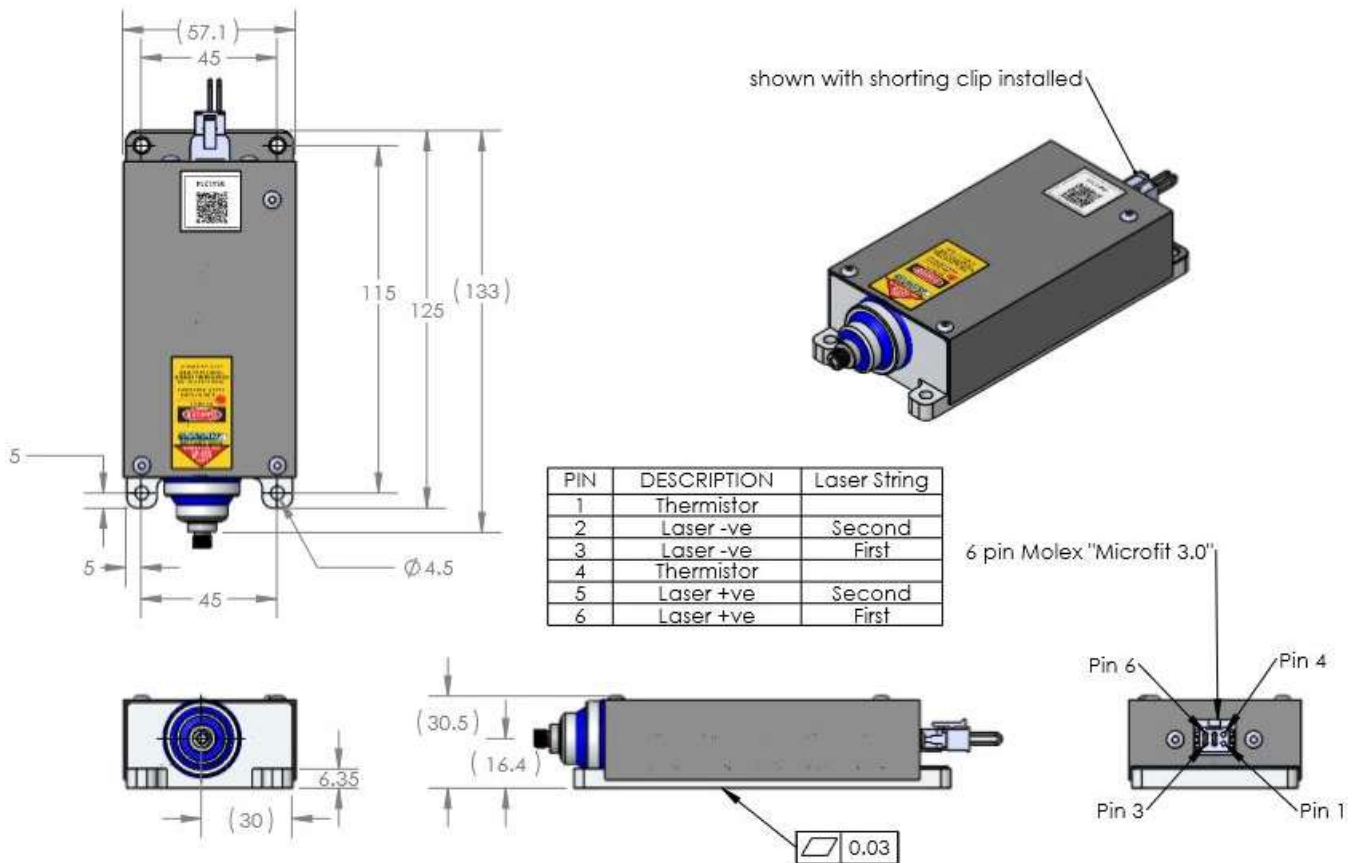
Power Supply Requirements

Operating Voltage (5 in series)	V_{op}	12.0	22.5	24.0	V
Operating Voltage String 2 (3 in series)	V_{op}	6.0	13.5	14.4	V
Operating Voltage String 1 (2 in series)	V_{op}	6.0	9.0	9.6	V
Operating Current	I_{op}	-	1.6	1.7	A
Allowable Reverse Current	I_r	-	-	85	mA

Fiber Specifications

Fiber Core Diameter (Centration $\leq 10 \mu\text{m}$)		0.400		mm
Connector Type (Nose length 0.3850 - 0.3863 in., 9.779 – 9.812 mm)		SMA-905		
Numerical Aperture		0.22		

Outline Drawing and Electrical Connections



Necsel follows a policy of continuous product improvement and may change product descriptions and specifications at any time without notice. Necsel offers a limited product warranty to ensure customer satisfaction. Standard terms and conditions can be found on the web at <http://necsel.com/terms-conditions>. This product is solely intended to be integrated into a laser product certified by the Customer. The Customer acknowledges that their product(s) that incorporate Necsel laser products must comply with the applicable regulations before it can be sold.

