

**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	$\lambda$	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 $P_{op}$ ]	$\lambda$	440	445	449	nm
Wavelength Temperature Coefficient	-	-	-	0.1	nm/°C
Threshold Current	$I_{th}$	-	350	-	mA
Slope Efficiency	$\eta$	-	8.0	-	W/A
Laser Power Conversion Efficiency	PCE	-	28	-	%

**Power Supply Requirements**

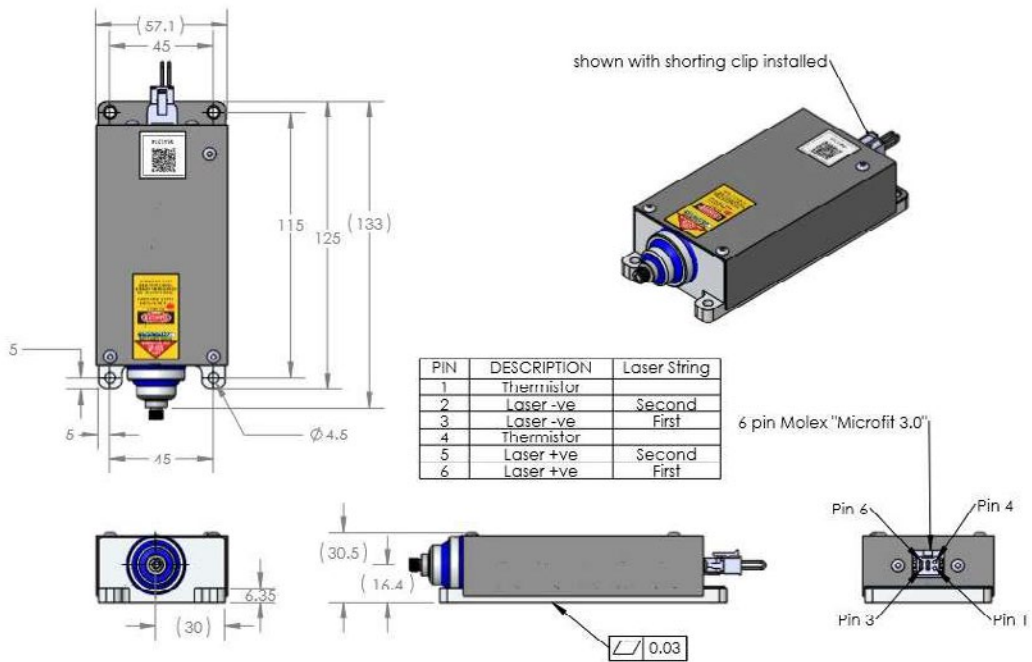
Operating Voltage (5 in series)	$V_{op}$	12.0	22.5	24.0	V
Operating Voltage String 2 (3 in series)	$V_{op}$	6.0	13.5	14.4	V
Operating Voltage String 1 (2 in series)	$V_{op}$	6.0	9.0	9.6	V
Operating Current	$I_{op}$	-	1.6	1.7	A
Allowable Reverse Current	$I_r$	-	-	85	mA

**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



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