

Datasheet: Necsel™ Green SHG FS Laser

These specifications are for the Necsel green SHG free space package. The centroid of the wavelength spectrum will be within the indicated wavelength range.



Model #	Symbol	Min. (nm)	Typical (nm)	Max. (nm)
Necsel-SHG-FS-55x	λ	550	-	556

Operating Wavelengths

Laser Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Power (CW)	P_{op}	2.1	-	-	W
Module Operating Temperature [non-condensing atmosphere]	$T_{Thermistor}$	-	30	-	°C
Center Wavelength [at 25°C and P_{op}]	λ	550	-	556	nm
Spectral width @ FWHM	$\Delta\lambda$	-	0.2	-	nm

Single Beam Specifications

Beam Diameter at $1/e^2$	$2\omega_r$	-	0.08	0.15	mm
Beam Divergence, Full Angle at $1/e^2$	θ_r	8	10	14	mrad

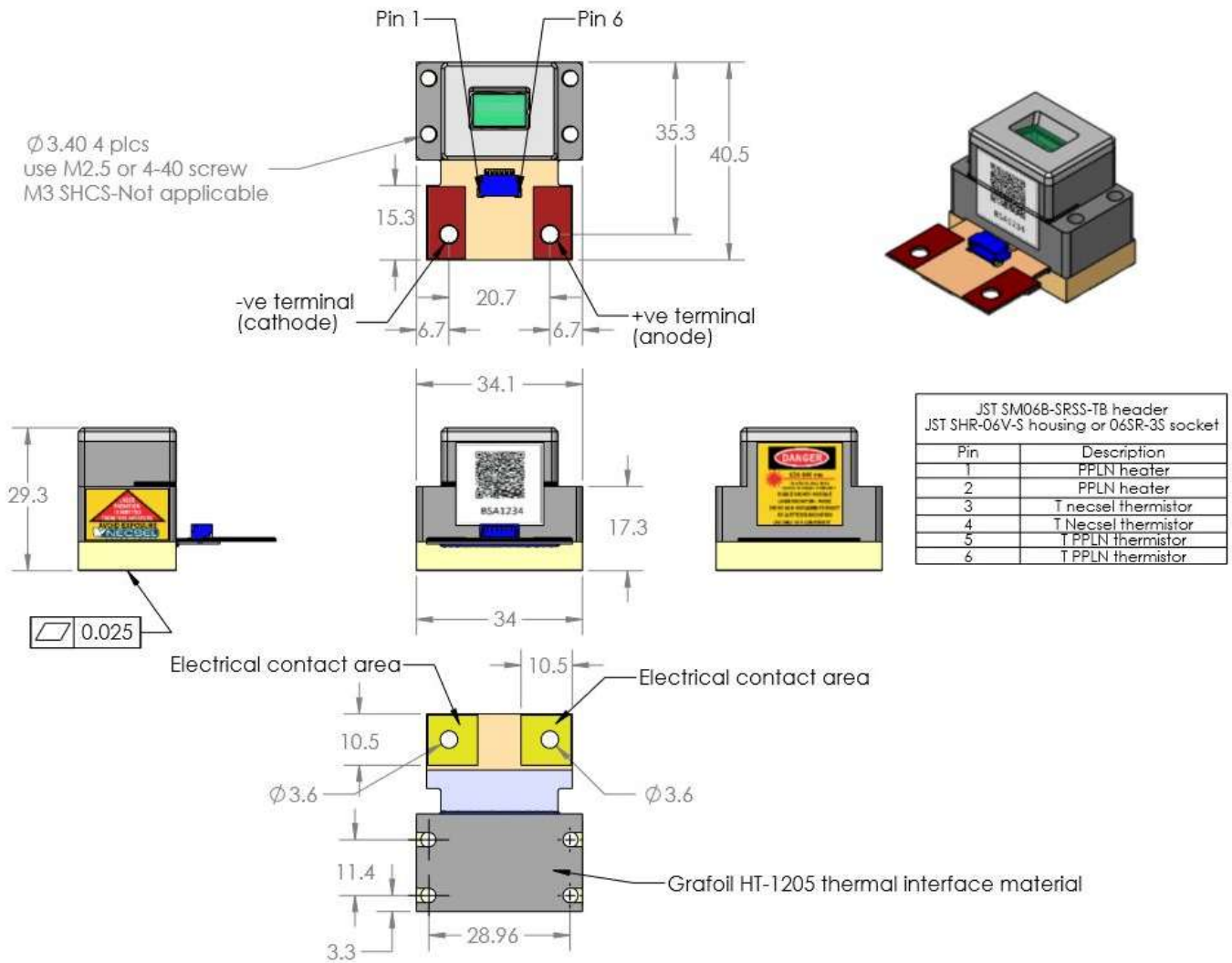
Array Specifications

Number of rows	-	2	-	2	-
Number of output beams per row	N	20	24	24	-
Row separation	-	-	2.1	-	mm
Emitter Pitch	d	-	0.328	-	mm
Polarization ratio	-	100:1	150:1	2000:1	-
IR leakage [diffuse]	P_{IR}	-	3	5	mW
Laser Power Conversion Efficiency	PCE	-	4.7	-	%

Power Supply Requirements

Operating Voltage	V_{op}	-	2.5	3.0	V
Operating Current	I_{op}	-	18	23	A

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.



Datasheet: Necsel™ Green SHG FC Laser

These specifications are for the Necsel green SHG fiber-coupled package. The centroid of the wavelength spectrum will be within the indicated wavelength range.



Model #	Symbol	Min. (nm)	Typical (nm)	Max. (nm)
Necsel-SHG-FC-55x	λ	550	-	556

Operating Wavelengths

Laser Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Power (CW)	P_{op}	1.7	-	-	W
Module Operating Temperature [non-condensing atmosphere]	$T_{Thermistor}$	-	30	-	°C
Center Wavelength [at 25°C and P_{op}]	λ	550	-	556	nm
Spectral width @ FWHM	$\Delta\lambda$	-	0.2	-	nm
Laser Power Conversion Efficiency	PCE	-	3.8	-	%

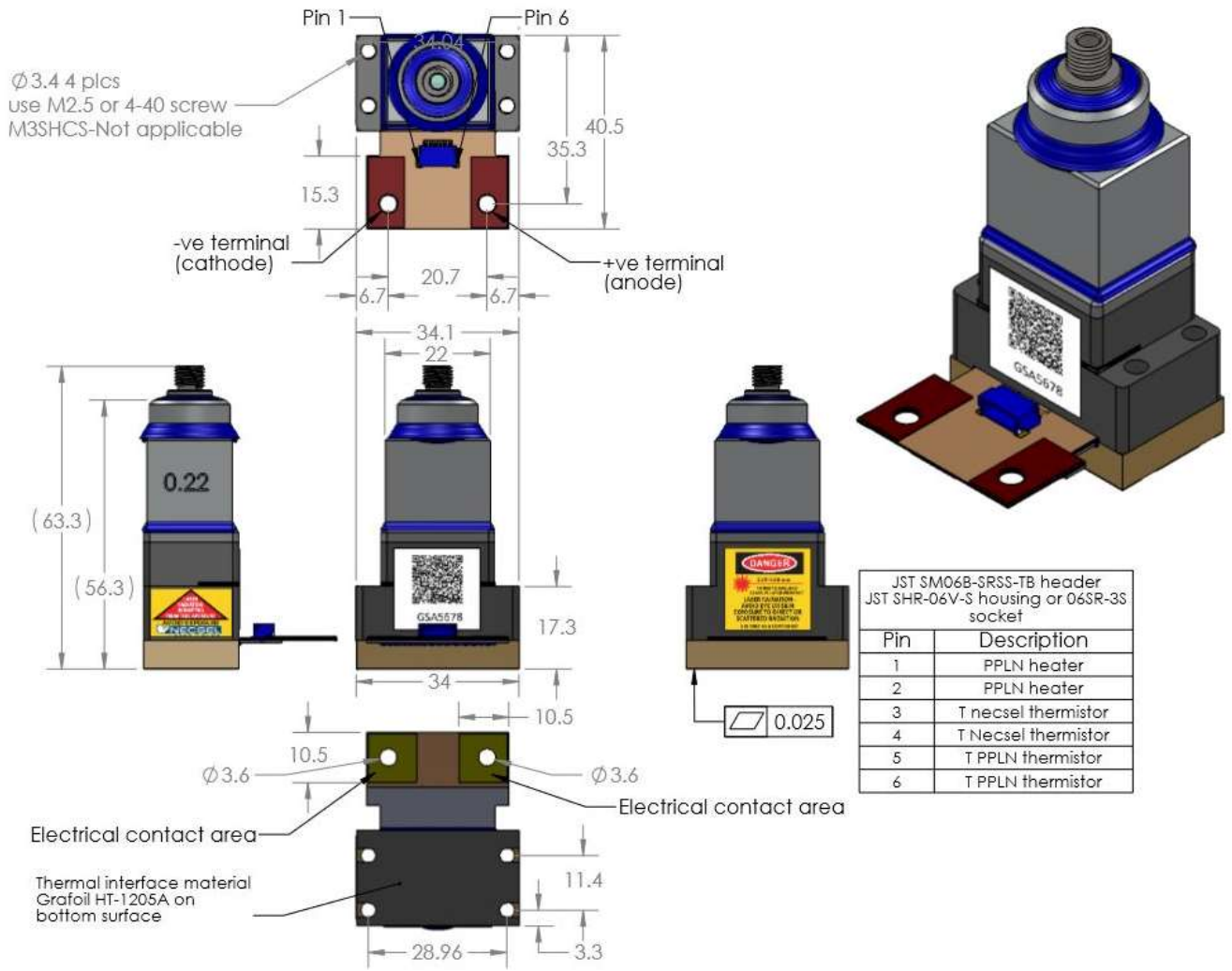
Power Supply Requirements

Operating Voltage	V_{op}	-	2.5	3.0	V
Operating Current	I_{op}	-	18	23	A

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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