



**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-53x	$\lambda$	530	-	539

**Operating Wavelengths**

Laser Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Power (CW)	$P_{op}$	3.0	-	-	W
Module Operating Temperature [non-condensing atmosphere]	$T_{Thermistor}$	-	30	-	°C
Center Wavelength [at 25°C and $P_{op}$ ]	$\lambda$	530	-	539	nm
Spectral width @ FWHM	$\Delta\lambda$	-	0.2	-	nm
Laser Power Conversion Efficiency	PCE	-	6.5	-	%

**Single Beam Specifications**

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

**Array Specifications**

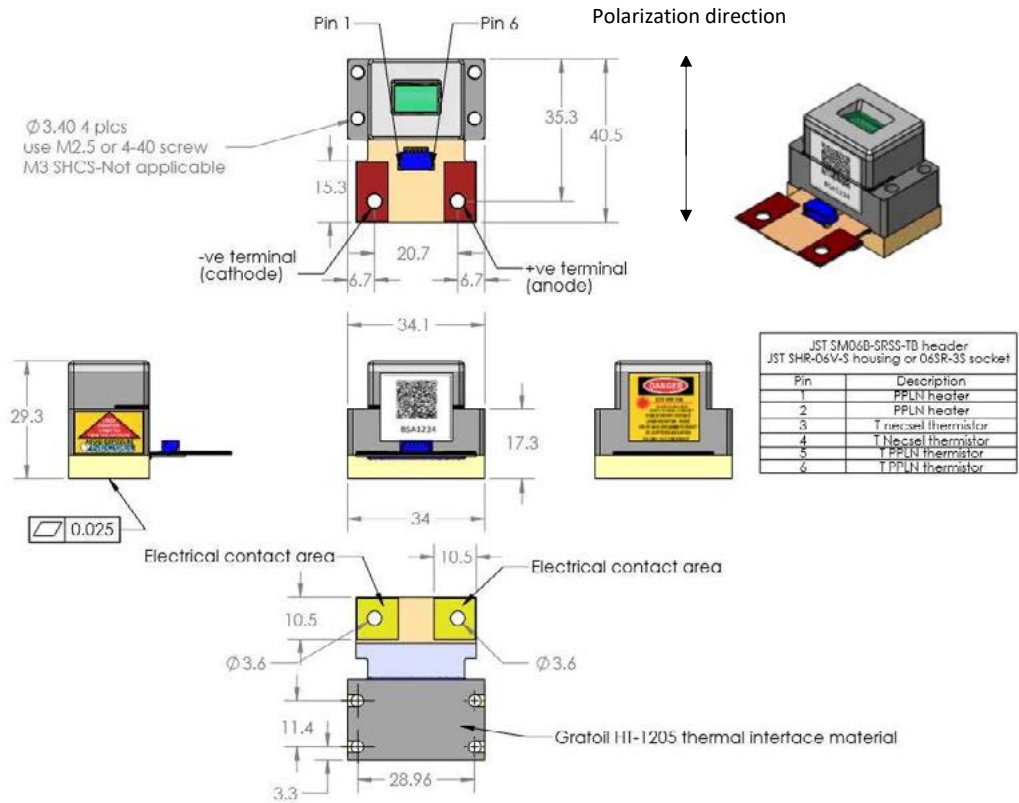
Number of rows	-	2	-	2	-
Number of output beams per row	N	20	24	24	-
Row separation	-	-	2.1	-	mm
Emitter Pitch	d	-	0.328	-	mm
Polarization ratio	-	100:1	150:1	2000:1	-
IR leakage [diffuse]	$P_{IR}$	-	3	5	mW

**Power Supply Requirements**

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

**USHIO**

Outline Drawing and Electrical Connections



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