

Datasheet for #sbcw26979 DN

Recommendations:

Please read the User Manual and have a look at the FAQ at <https://www.alpeslasers.ch/resources/#faq>

WARNING: Operating the laser with higher current or voltage than specified in this document may cause damage and will result in loss of warranty, unless Alpes Lasers has permitted to do so!

WARNING: Beware of the polarity of the laser. This laser has to be powered with negative bias and positive bias on the specific zones drawn below. To be used with a high compliance CW laser driver capable of reaching the operating current and voltage indicated in this datasheet, or up to 2.5A/20V.

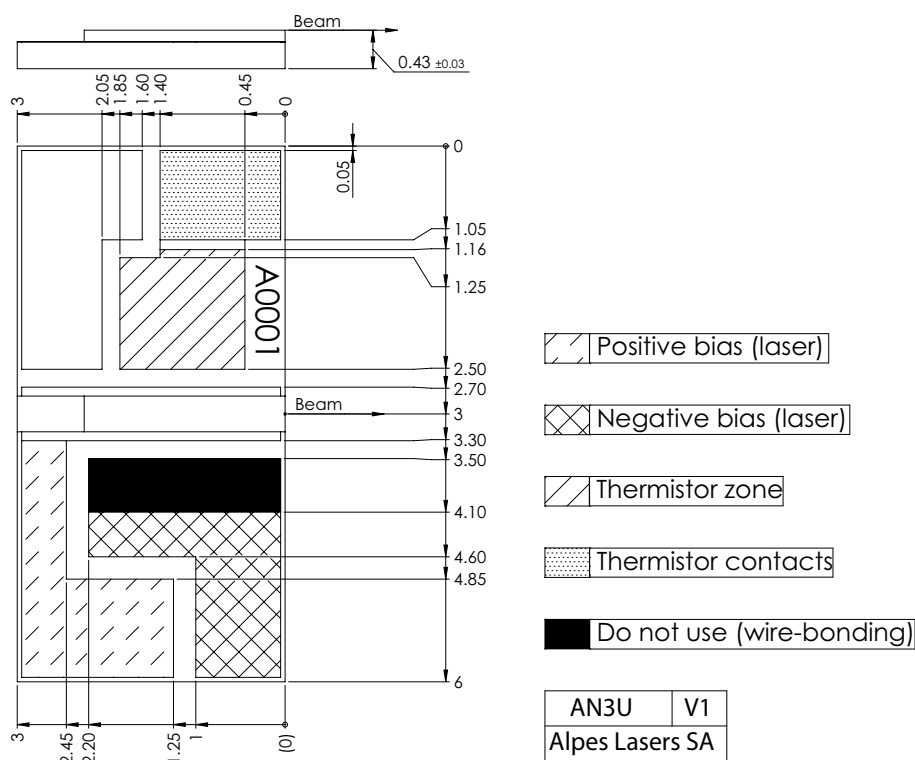


Figure 1: Mechanical and electrical interface for #sbcw26979 DN (please note that AlN submount numbering is A0X61)

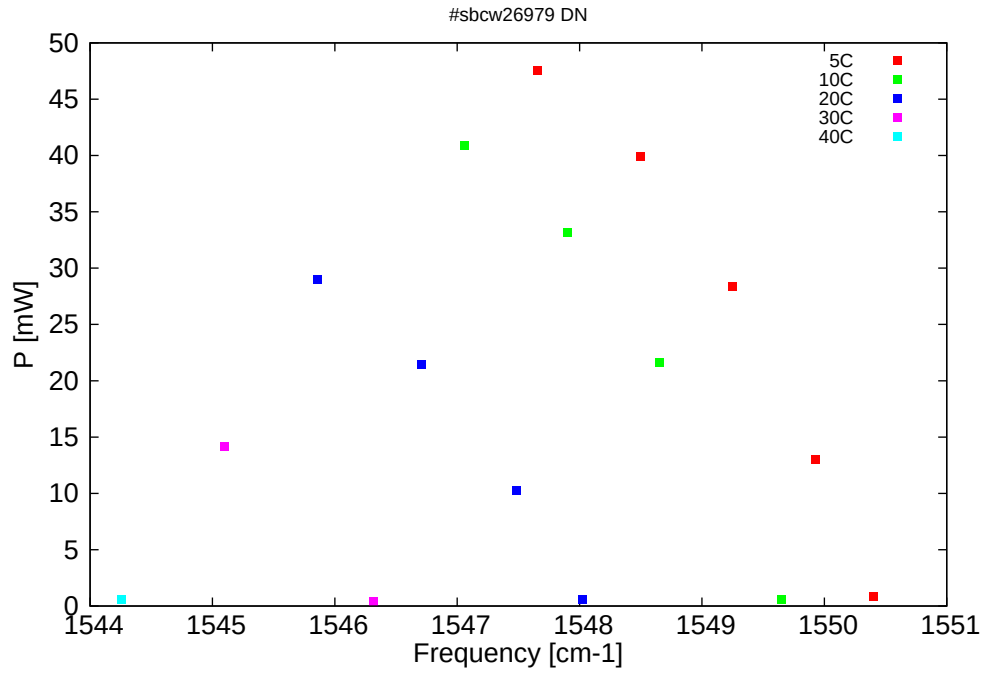


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

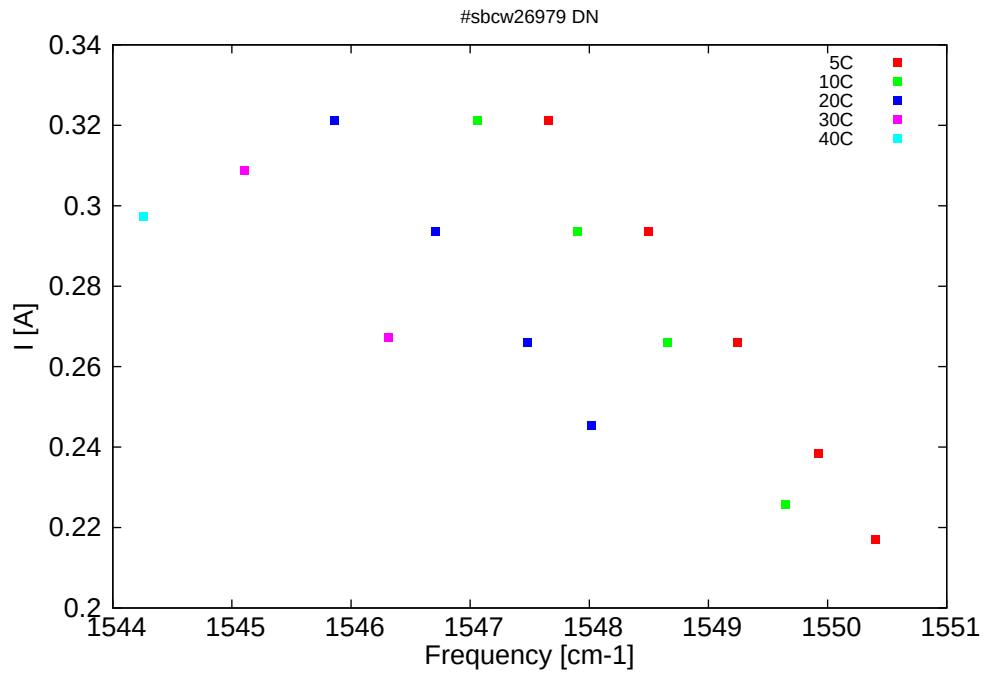


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
6449.9	1550.4	0.8	5	12.05	0.217
6451.9	1549.9	13	5	12.34	0.238
6454.7	1549.2	28.4	5	12.72	0.266
6457.9	1548.5	39.9	5	13.12	0.294
6461.4	1547.7	47.5	5	13.51	0.321
6453.1	1549.6	0.6	10	12.1	0.226
6457.2	1548.7	21.7	10	12.66	0.266
6460.4	1547.9	33.2	10	13.05	0.294
6463.9	1547.1	40.9	10	13.44	0.321
6459.9	1548	0.5	20	12.25	0.245
6462.1	1547.5	10.3	20	12.53	0.266
6465.3	1546.7	21.4	20	12.92	0.294
6468.9	1545.9	29	20	13.31	0.321
6467	1546.3	0.4	30	12.41	0.267
6472.1	1545.1	14.2	30	12.98	0.309
6475.6	1544.3	0.6	40	12.68	0.297

Table 1: Singlemode optical output power as function of operating parameters.

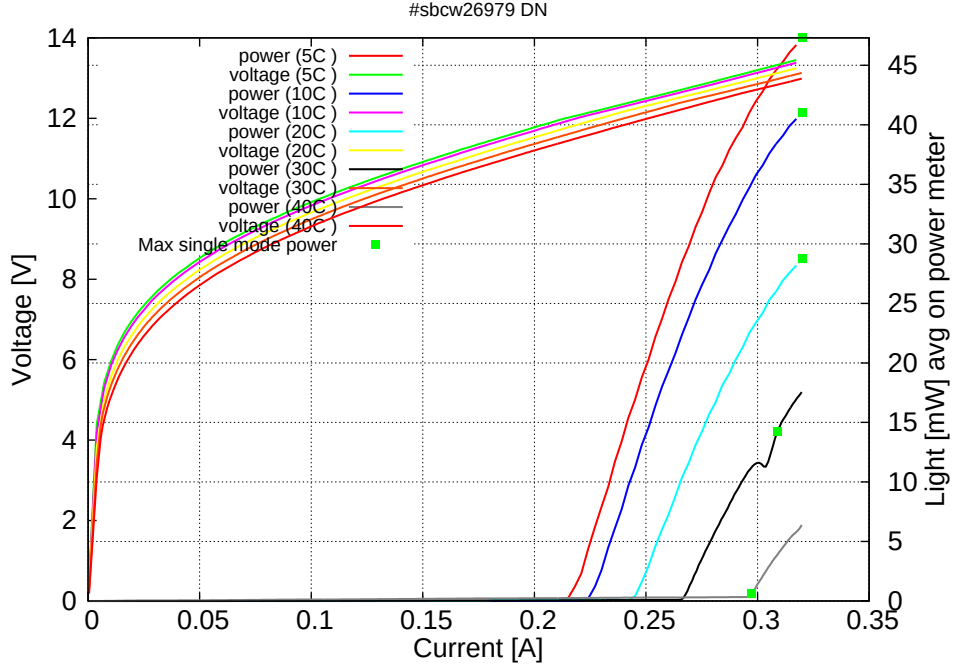


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at 5C: I_{th}=0.21A / V_{th}=12.0V (2-wires measurements). Maximum operation current: 0.32A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

