

Datasheet for #sbcw26668 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 #sbcw26668 DN (please note that AlN submount numbering is A0UCE)

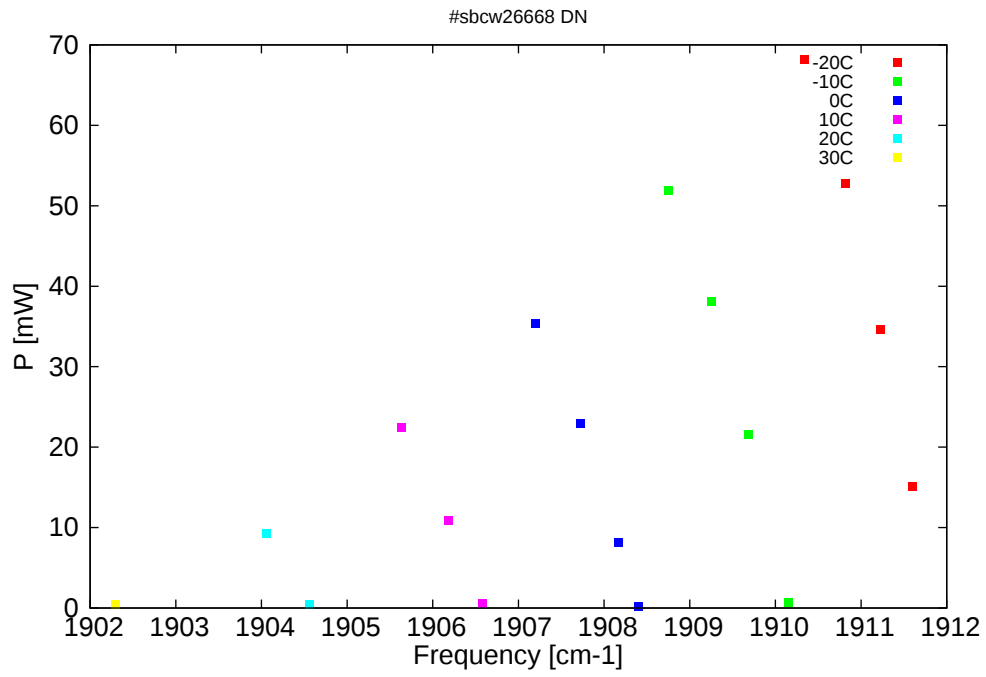


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

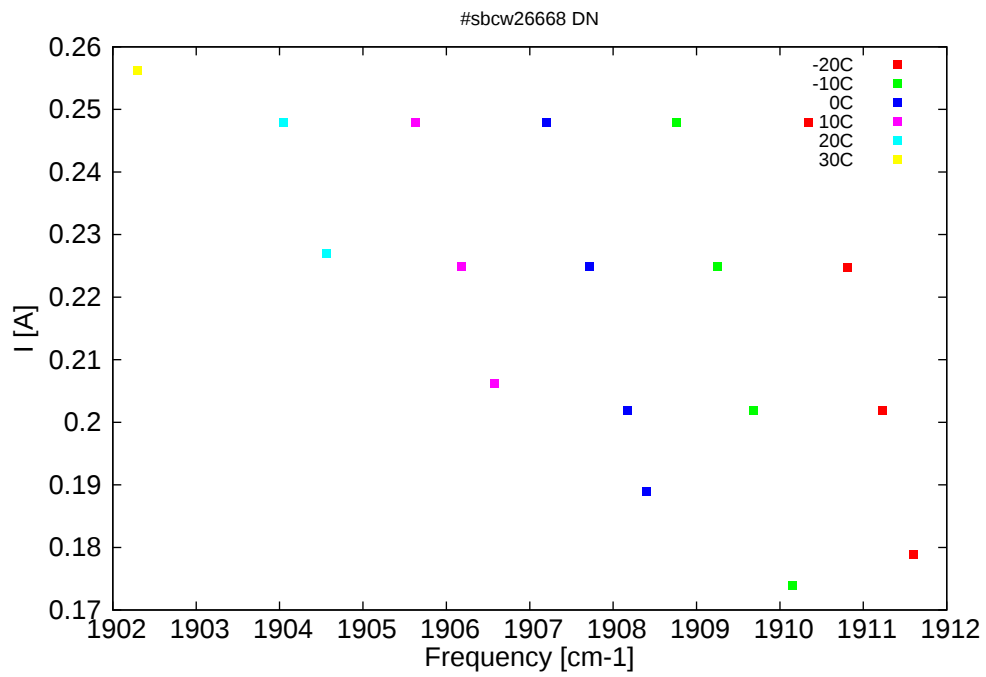


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
5231.2	1911.6	15.1	-20	8.15	0.179
5232.2	1911.2	34.7	-20	8.36	0.202
5233.4	1910.8	52.8	-20	8.59	0.225
5234.7	1910.3	68.2	-20	8.84	0.248
5235.2	1910.1	0.7	-10	8.09	0.174
5236.5	1909.7	21.6	-10	8.35	0.202
5237.7	1909.3	38.1	-10	8.58	0.225
5239	1908.8	51.9	-10	8.84	0.248
5240	1908.4	0.2	0	8.2	0.189
5240.6	1908.2	8.2	0	8.32	0.202
5241.9	1907.7	23	0	8.56	0.225
5243.3	1907.2	35.4	0	8.83	0.248
5245	1906.6	0.6	10	8.35	0.206
5246.1	1906.2	10.8	10	8.55	0.225
5247.6	1905.6	22.4	10	8.82	0.248
5250.6	1904.6	0.5	20	8.57	0.227
5252	1904.1	9.2	20	8.82	0.248
5256.8	1902.3	0.4	30	8.91	0.256

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

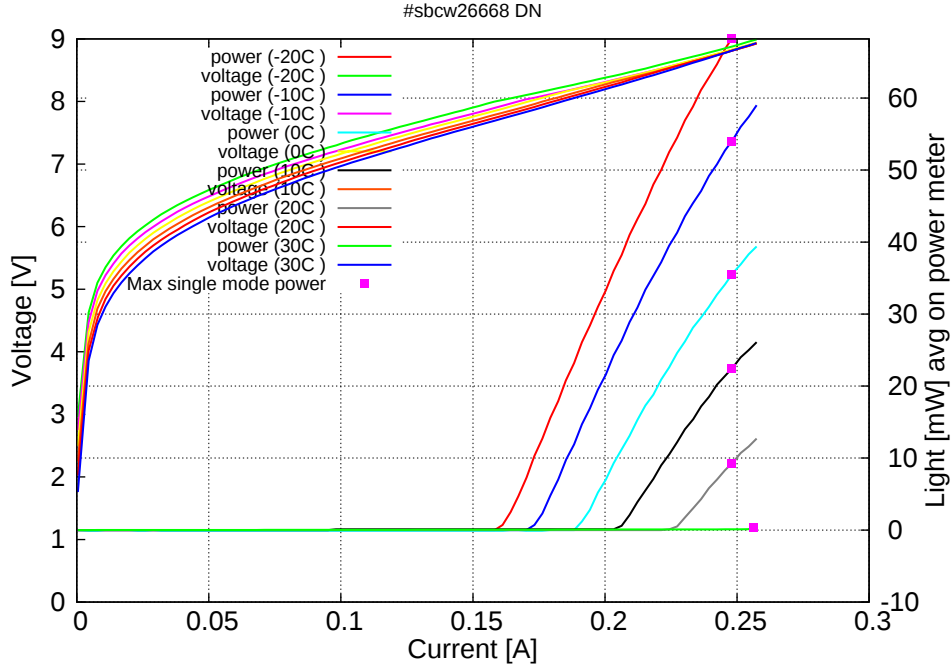


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.16A$ / $V_{th}=8.0V$ (2-wires measurements). Maximum operation current: 0.26A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

