

Datasheet for #sbcw26672 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 #sbcw26672 DN (please note that AlN submount numbering is A0UDD)

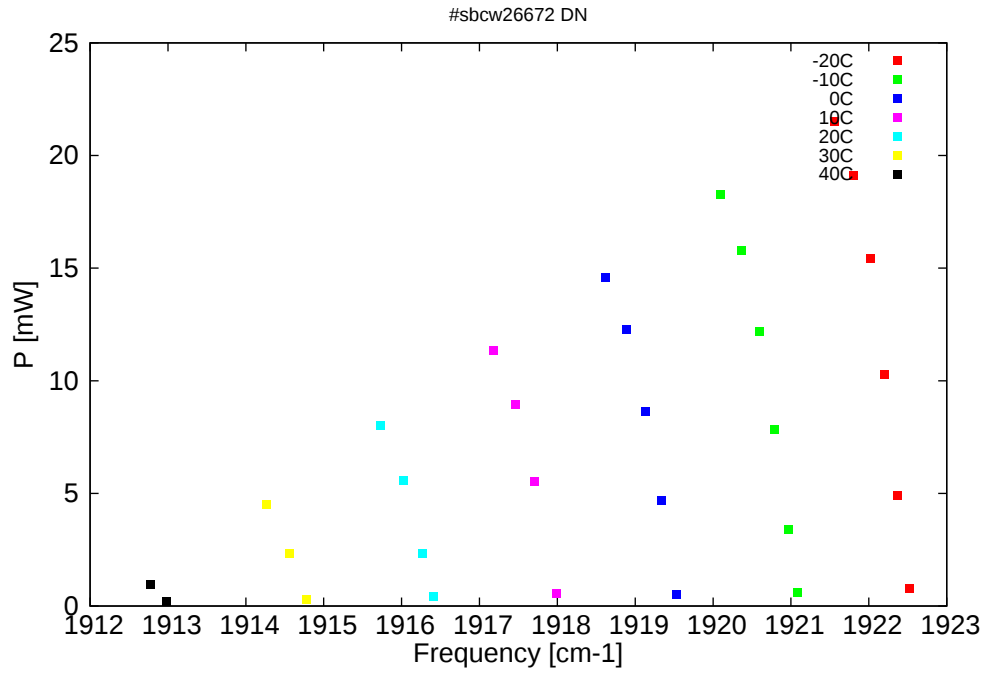


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

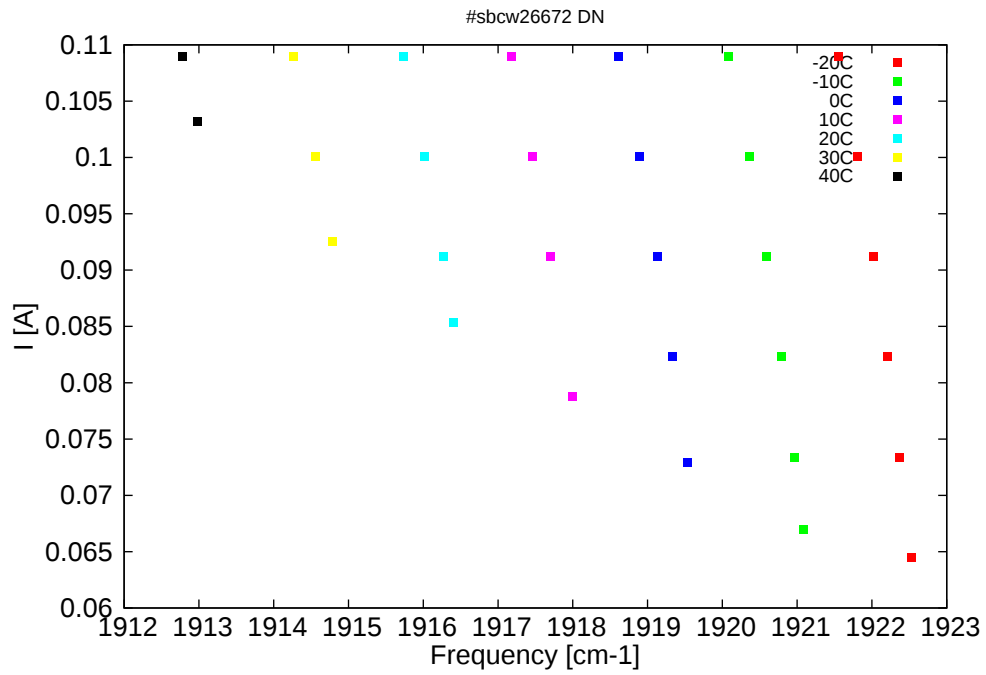


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
5201.5	1922.5	0.8	-20	8.21	0.065
5201.9	1922.4	4.9	-20	8.42	0.073
5202.4	1922.2	10.3	-20	8.66	0.082
5202.9	1922	15.4	-20	8.91	0.091
5203.4	1921.8	19.1	-20	9.2	0.1
5204.1	1921.6	21.5	-20	9.52	0.109
5205.4	1921.1	0.6	-10	8.25	0.067
5205.7	1921	3.4	-10	8.42	0.073
5206.2	1920.8	7.9	-10	8.66	0.082
5206.7	1920.6	12.2	-10	8.91	0.091
5207.4	1920.4	15.8	-10	9.19	0.1
5208.1	1920.1	18.3	-10	9.51	0.109
5209.6	1919.5	0.5	0	8.38	0.073
5210.1	1919.3	4.7	0	8.63	0.082
5210.7	1919.1	8.6	0	8.88	0.091
5211.4	1918.9	12.3	0	9.16	0.1
5212.1	1918.6	14.6	0	9.48	0.109
5213.8	1918	0.5	10	8.51	0.079
5214.6	1917.7	5.5	10	8.86	0.091
5215.2	1917.5	9	10	9.13	0.1
5216	1917.2	11.4	10	9.45	0.109
5218.1	1916.4	0.4	20	8.68	0.085
5218.5	1916.3	2.3	20	8.84	0.091
5219.2	1916	5.6	20	9.11	0.1
5219.9	1915.7	8	20	9.43	0.109
5222.5	1914.8	0.3	30	8.88	0.093
5223.1	1914.6	2.3	30	9.11	0.1
5223.9	1914.3	4.5	30	9.41	0.109
5227.4	1913	0.2	40	9.22	0.103
5228	1912.8	0.9	40	9.41	0.109

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

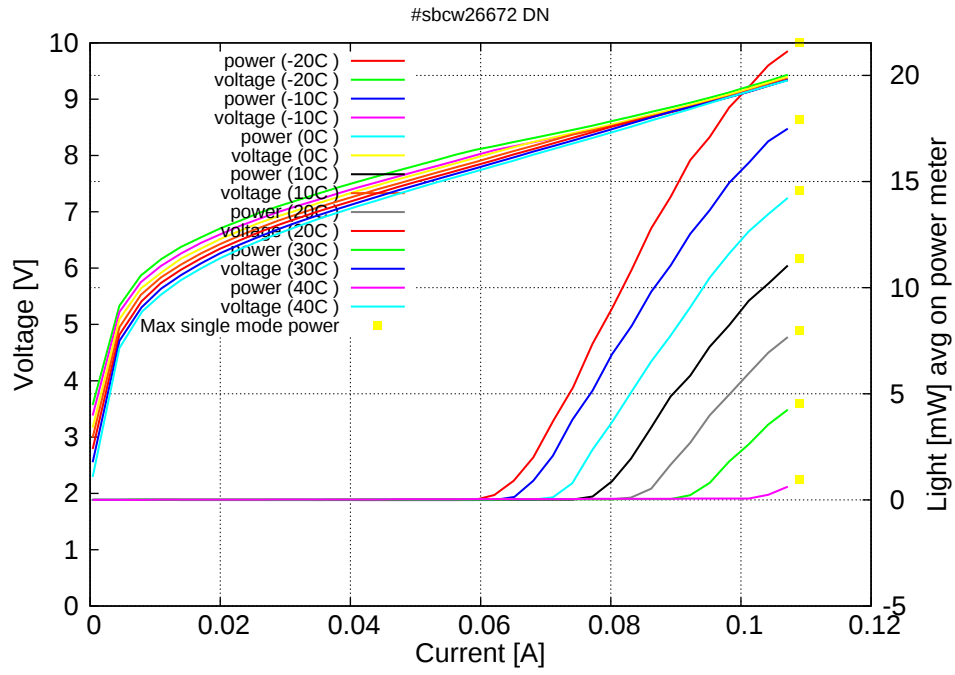


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.06A$ / $V_{th}=8.2V$ (2-wires measurements). Maximum operation current: 0.11A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

