

**Datasheet for #sbcw26826 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.

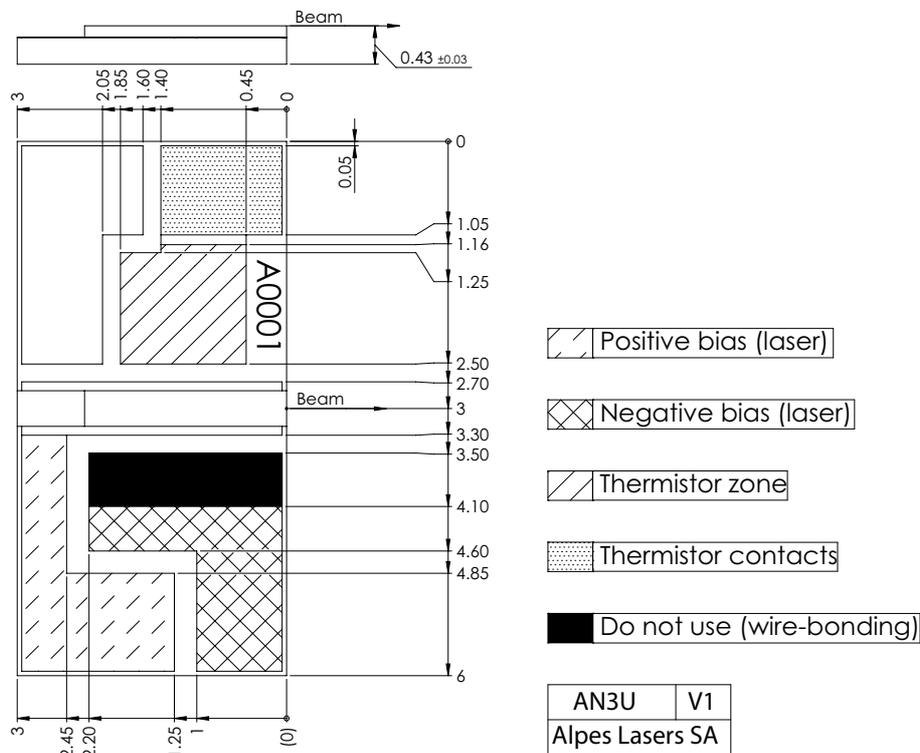


Figure 1: Mechanical and electrical interface for #sbcw26826 DN (please note that AlN submount numbering is A0W6A)

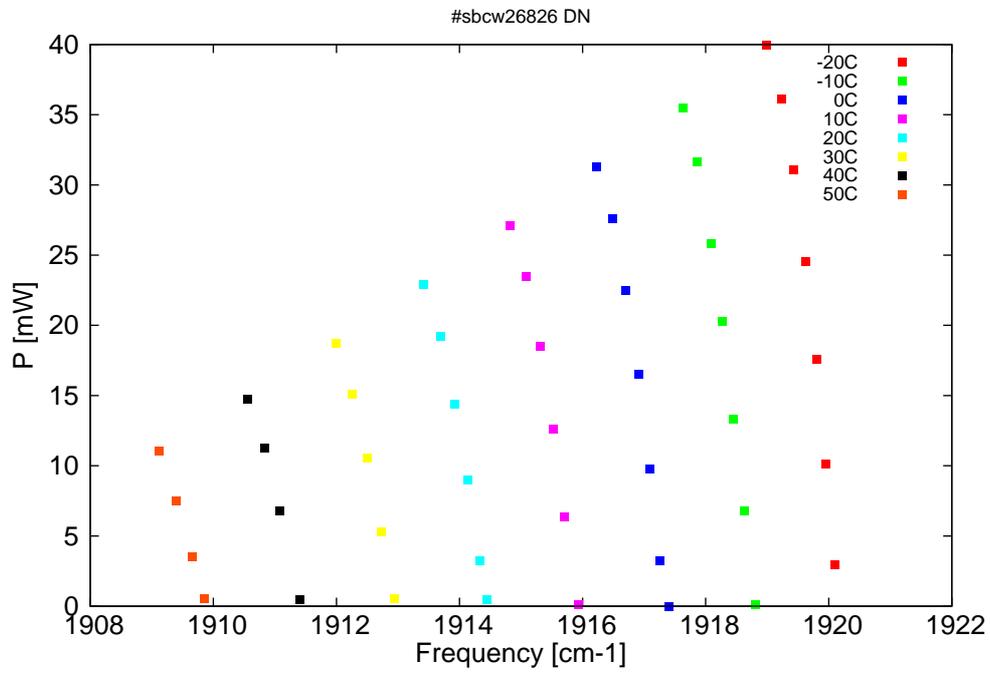


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

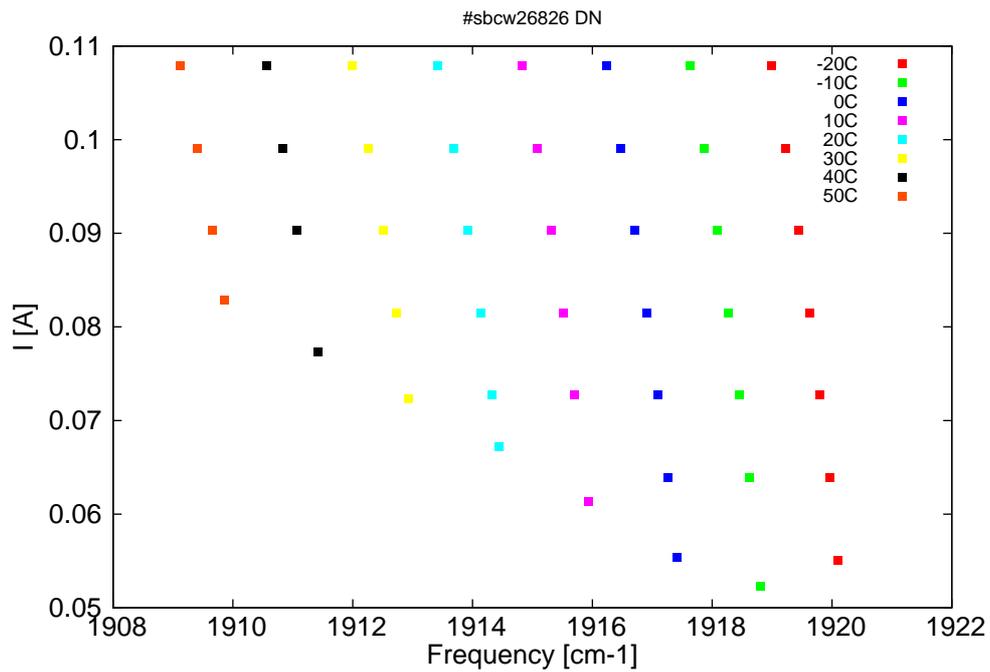


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda$ [nm]	$\nu$ [cm <sup>-1</sup> ]	P[mW]	Temp[°C]	$U_{LASER}$ [V]	I[A]
5208.1	1920.1	3	-20	7.77	0.055
5208.4	1920	10.1	-20	7.96	0.064
5208.9	1919.8	17.6	-20	8.15	0.073
5209.4	1919.6	24.5	-20	8.35	0.082
5209.9	1919.4	31.1	-20	8.56	0.09
5210.4	1919.2	36.1	-20	8.8	0.099
5211.1	1919	40	-20	9.05	0.108
5211.6	1918.8	0.1	-10	7.68	0.052
5212.1	1918.6	6.8	-10	7.92	0.064
5212.5	1918.5	13.3	-10	8.12	0.073
5213	1918.3	20.3	-10	8.32	0.082
5213.5	1918.1	25.8	-10	8.53	0.09
5214.1	1917.9	31.6	-10	8.77	0.099
5214.8	1917.6	35.5	-10	9.02	0.108
5215.4	1917.4	0	0	7.72	0.055
5215.8	1917.3	3.2	0	7.89	0.064
5216.2	1917.1	9.7	0	8.09	0.073
5216.7	1916.9	16.5	0	8.29	0.082
5217.3	1916.7	22.4	0	8.5	0.09
5217.9	1916.5	27.6	0	8.74	0.099
5218.6	1916.2	31.3	0	8.99	0.108
5219.4	1915.9	0.1	10	7.81	0.061
5220	1915.7	6.4	10	8.06	0.073
5220.5	1915.5	12.6	10	8.26	0.082
5221.1	1915.3	18.5	10	8.48	0.09
5221.7	1915.1	23.5	10	8.71	0.099
5222.4	1914.8	27.1	10	8.96	0.108
5223.5	1914.4	0.4	20	7.91	0.067
5223.8	1914.3	3.2	20	8.03	0.073
5224.3	1914.1	9	20	8.24	0.082
5224.9	1913.9	14.4	20	8.45	0.09
5225.5	1913.7	19.2	20	8.68	0.099
5226.2	1913.4	22.9	20	8.93	0.108
5227.6	1912.9	0.5	30	7.99	0.072
5228.1	1912.7	5.3	30	8.21	0.082
5228.7	1912.5	10.6	30	8.42	0.09
5229.4	1912.3	15.1	30	8.65	0.099
5230.1	1912	18.7	30	8.89	0.108
5231.7	1911.4	0.5	40	8.08	0.077
5232.7	1911.1	6.8	40	8.39	0.09
5233.3	1910.8	11.3	40	8.61	0.099
5234.1	1910.6	14.7	40	8.85	0.108
5236	1909.9	0.5	50	8.18	0.083
5236.5	1909.7	3.5	50	8.36	0.09
5237.2	1909.4	7.5	50	8.58	0.099
5238	1909.1	11	50	8.82	0.108

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

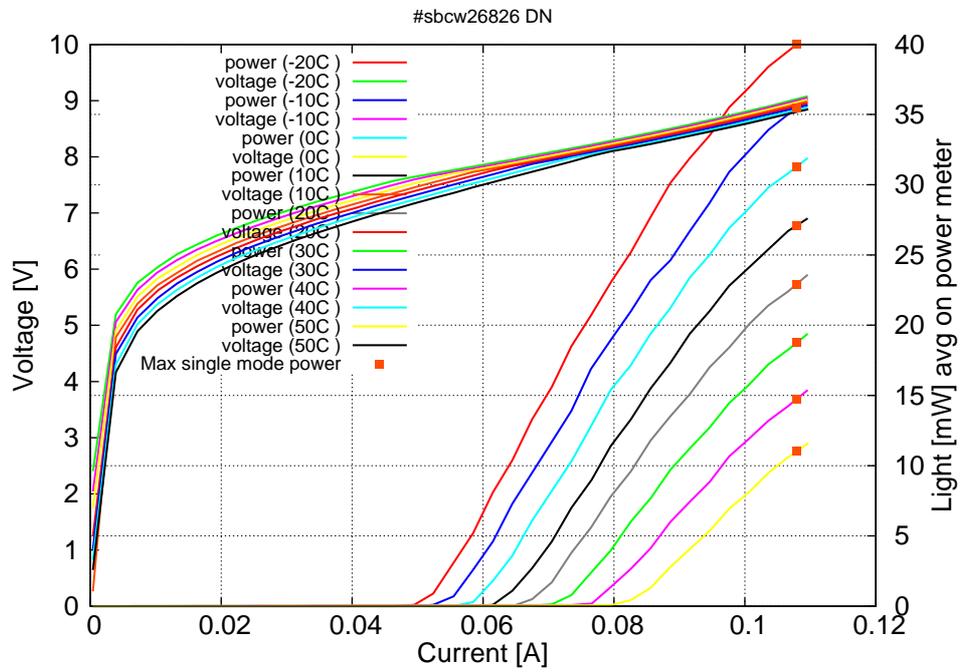


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C:  $I_{th}=0.05A$  /  $V_{th}=7.7V$  (2-wires measurements). Maximum operation current: 0.11A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

