

Datasheet for #sbcw26808 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.

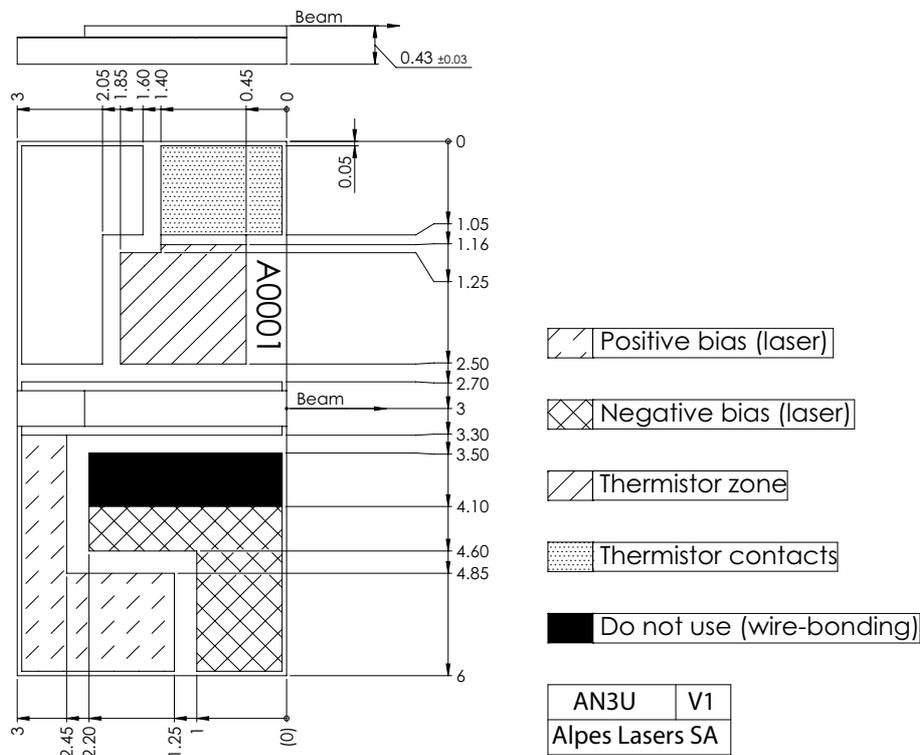


Figure 1: Mechanical and electrical interface for #sbcw26808 DN (please note that AlN submount numbering is A0UVY)

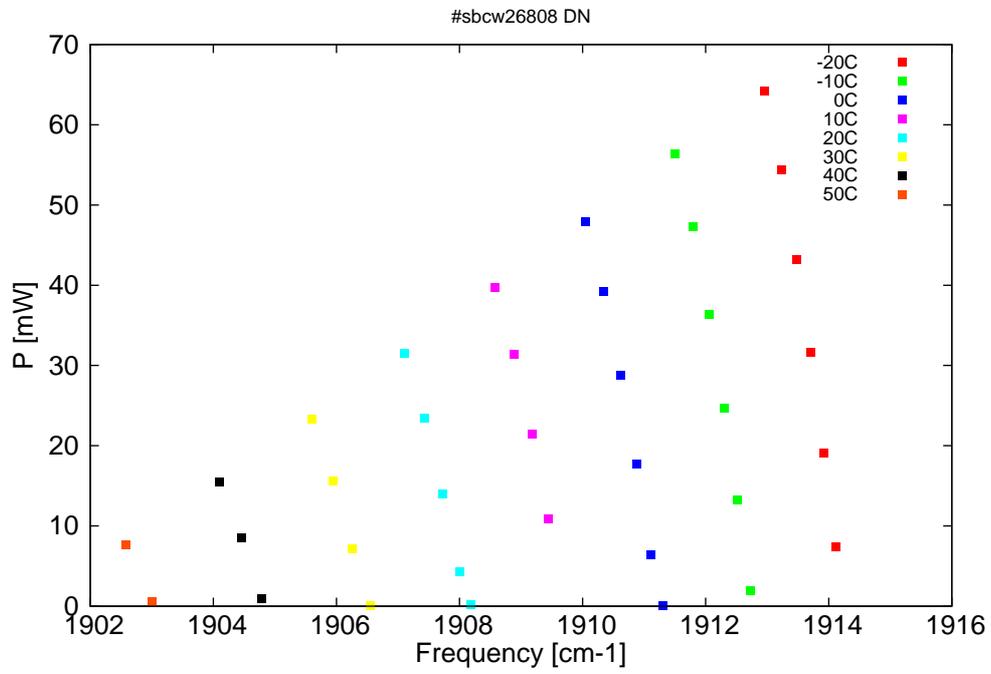


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

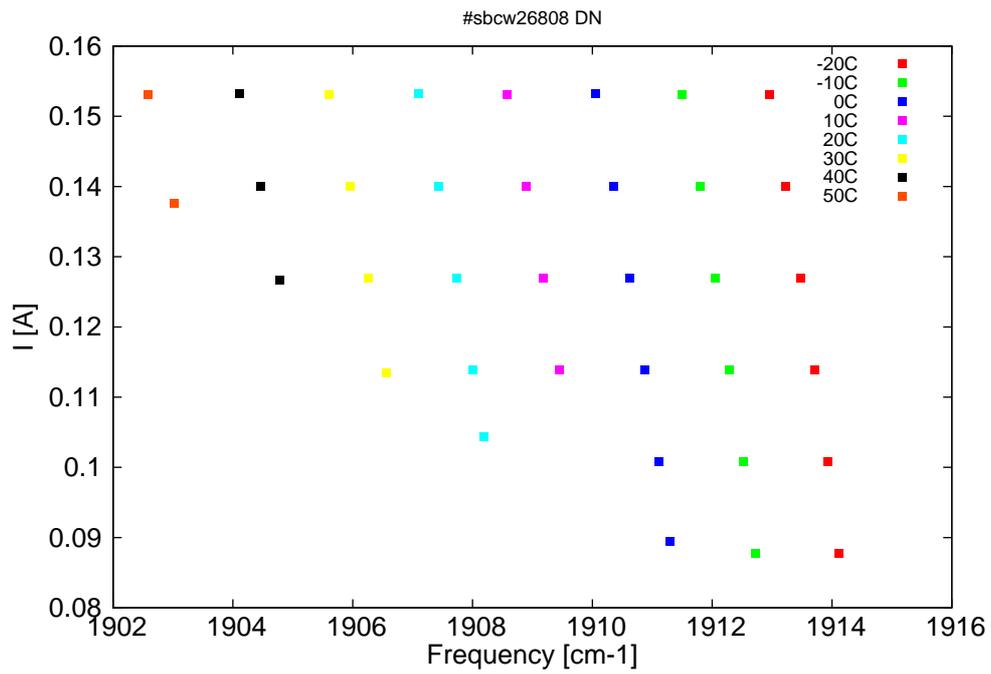


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
5224.3	1914.1	7.4	-20	7.86	0.088
5224.9	1913.9	19.1	-20	8.06	0.101
5225.5	1913.7	31.6	-20	8.25	0.114
5226.1	1913.5	43.2	-20	8.46	0.127
5226.8	1913.2	54.4	-20	8.68	0.14
5227.5	1913	64.2	-20	8.92	0.153
5228.1	1912.7	2	-10	7.83	0.088
5228.7	1912.5	13.2	-10	8.04	0.101
5229.3	1912.3	24.7	-10	8.24	0.114
5230	1912.1	36.3	-10	8.45	0.127
5230.7	1911.8	47.3	-10	8.68	0.14
5231.5	1911.5	56.3	-10	8.92	0.153
5232	1911.3	0.1	0	7.83	0.089
5232.6	1911.1	6.4	0	8.01	0.101
5233.2	1910.9	17.7	0	8.21	0.114
5233.9	1910.6	28.8	0	8.42	0.127
5234.6	1910.3	39.3	0	8.66	0.14
5235.5	1910	47.9	0	8.9	0.153
5237.1	1909.4	10.9	10	8.2	0.114
5237.8	1909.2	21.4	10	8.41	0.127
5238.6	1908.9	31.4	10	8.65	0.14
5239.5	1908.6	39.8	10	8.9	0.153
5240.6	1908.2	0.1	20	8.02	0.104
5241.1	1908	4.2	20	8.17	0.114
5241.8	1907.7	13.9	20	8.39	0.127
5242.6	1907.4	23.4	20	8.63	0.14
5243.5	1907.1	31.5	20	8.88	0.153
5245.1	1906.6	0.1	30	8.15	0.113
5245.9	1906.3	7.2	30	8.38	0.127
5246.7	1905.9	15.7	30	8.62	0.14
5247.7	1905.6	23.3	30	8.87	0.153
5249.9	1904.8	1	40	8.36	0.127
5250.8	1904.5	8.5	40	8.61	0.14
5251.8	1904.1	15.4	40	8.86	0.153
5254.8	1903	0.6	50	8.55	0.138
5256	1902.6	7.7	50	8.85	0.153

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

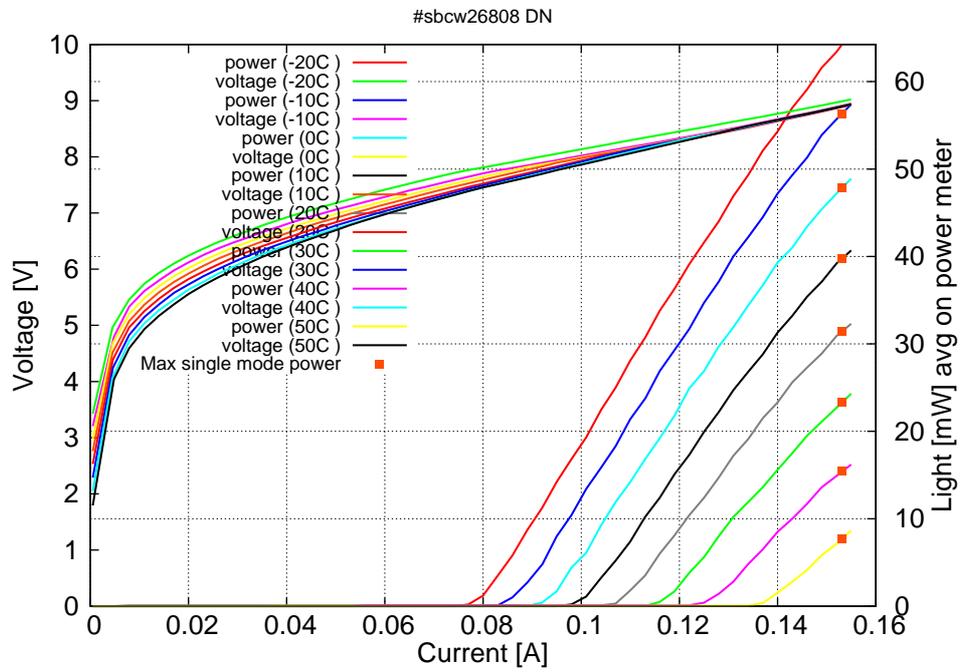


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.08A$ / $V_{th}=7.8V$ (2-wires measurements). Maximum operation current: 0.155A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

