

Datasheet for #sbcw26526 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.

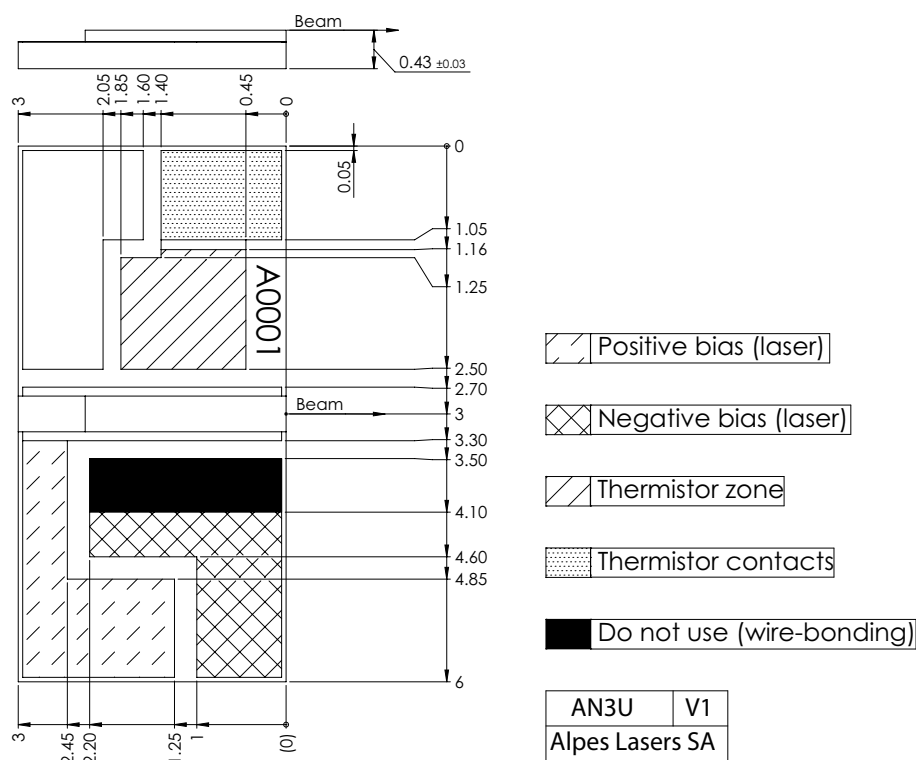


Figure 1: Mechanical and electrical interface for #sbcw26526 DN (please note that AlN submount numbering is A0V2D)

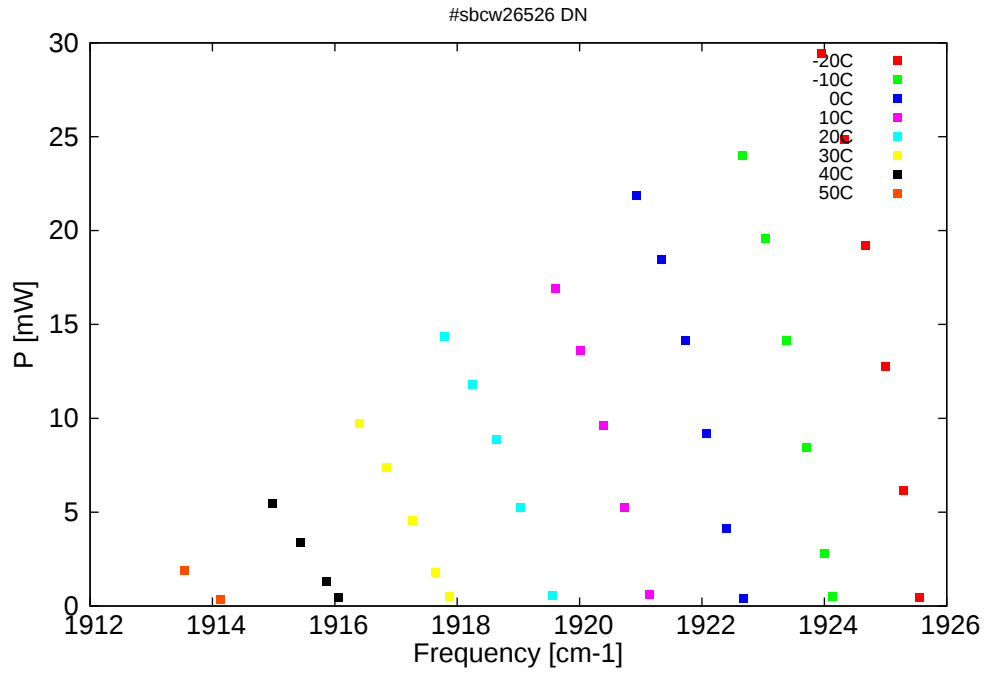


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

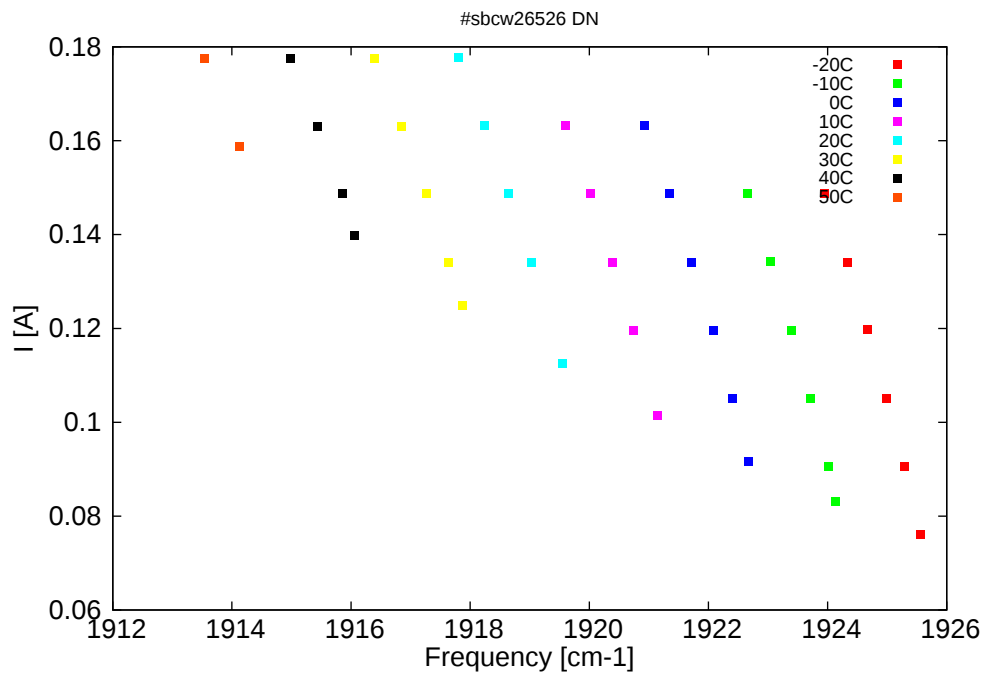


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
5193.3	1925.6	0.5	-20	8.18	0.076
5194	1925.3	6.2	-20	8.38	0.091
5194.8	1925	12.8	-20	8.59	0.105
5195.7	1924.7	19.2	-20	8.82	0.12
5196.6	1924.3	24.8	-20	9.05	0.134
5197.6	1924	29.4	-20	9.3	0.149
5197.1	1924.1	0.5	-10	8.21	0.083
5197.5	1924	2.8	-10	8.3	0.091
5198.3	1923.7	8.4	-10	8.5	0.105
5199.2	1923.4	14.1	-10	8.72	0.12
5200.1	1923	19.6	-10	8.95	0.134
5201.1	1922.7	24	-10	9.18	0.149
5201.1	1922.7	0.4	0	8.25	0.092
5201.8	1922.4	4.1	0	8.42	0.105
5202.7	1922.1	9.2	0	8.63	0.12
5203.7	1921.7	14.2	0	8.84	0.134
5204.7	1921.3	18.5	0	9.07	0.149
5205.8	1920.9	21.9	0	9.31	0.163
5205.2	1921.1	0.6	10	8.31	0.101
5206.3	1920.7	5.3	10	8.54	0.12
5207.3	1920.4	9.6	10	8.74	0.134
5208.3	1920	13.6	10	8.96	0.149
5209.4	1919.6	16.9	10	9.18	0.163
5209.5	1919.6	0.6	20	8.38	0.113
5210.9	1919	5.2	20	8.65	0.134
5212	1918.6	8.8	20	8.85	0.149
5213.1	1918.2	11.8	20	9.06	0.163
5214.3	1917.8	14.4	20	9.29	0.178
5214.1	1917.9	0.5	30	8.48	0.125
5214.7	1917.6	1.8	30	8.57	0.134
5215.8	1917.3	4.6	30	8.75	0.149
5216.9	1916.8	7.4	30	8.95	0.163
5218.1	1916.4	9.7	30	9.16	0.178
5219	1916.1	0.4	40	8.59	0.14
5219.6	1915.9	1.3	40	8.69	0.149
5220.7	1915.4	3.4	40	8.86	0.163
5222	1915	5.4	40	9.05	0.178
5224.3	1914.1	0.4	50	8.76	0.159
5225.9	1913.5	1.9	50	8.96	0.178

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

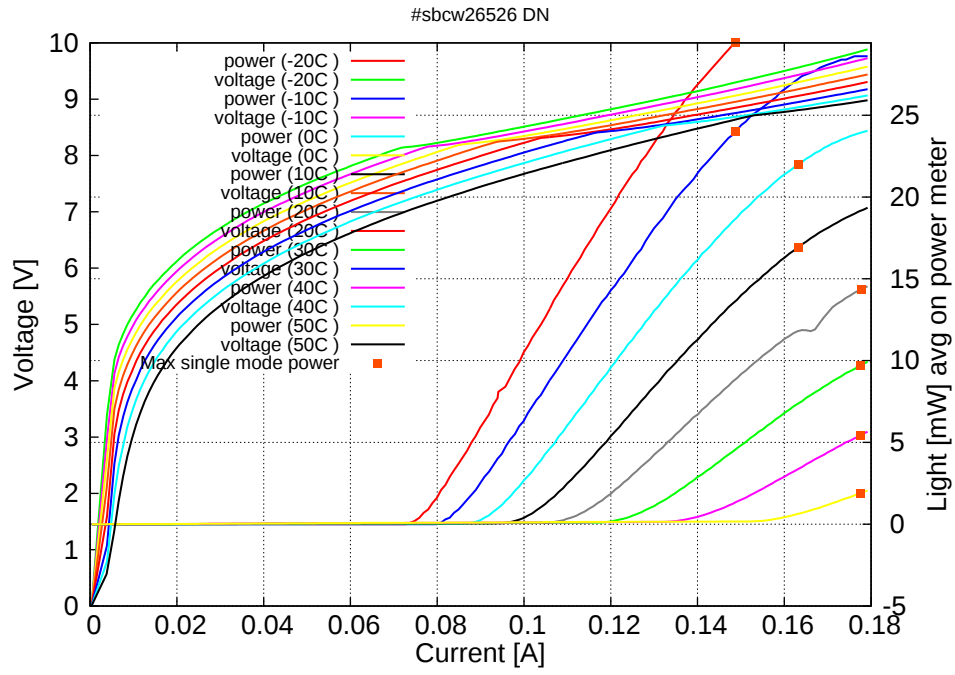


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.08A$ / $V_{th}=8.2V$ (2-wires measurements). Maximum operation current: 0.15A between -20C and -10C, 0.165A between 0C and 10C, 0.18A between 20C and 50C.

