

Datasheet for #sbcw26498 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.

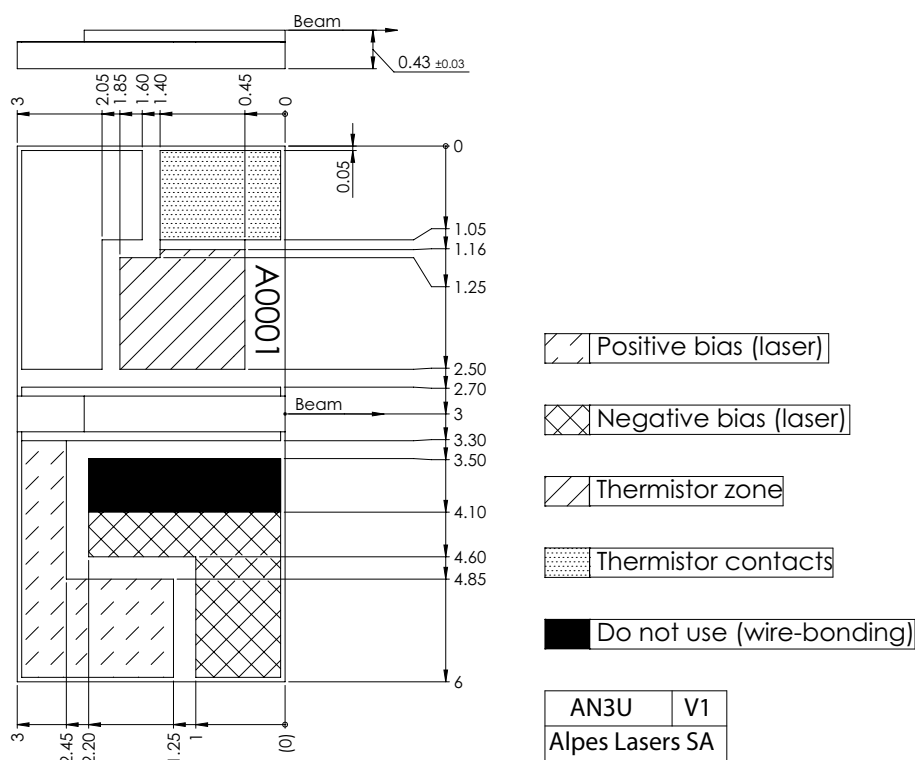


Figure 1: Mechanical and electrical interface for #sbcw26498 DN (please note that AlN submount numbering is A0VML)

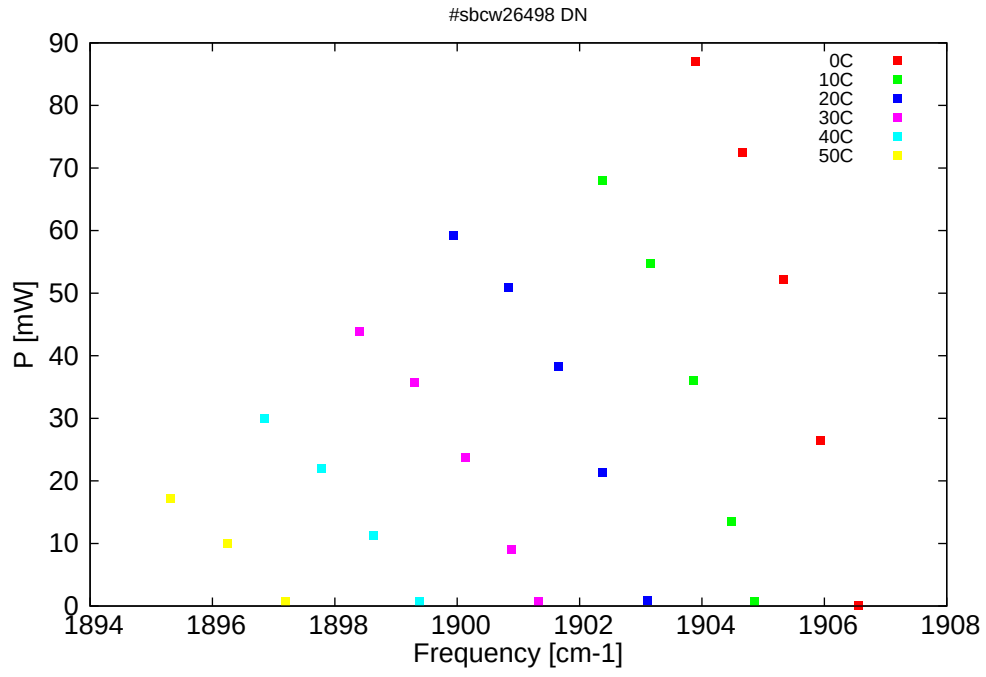


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

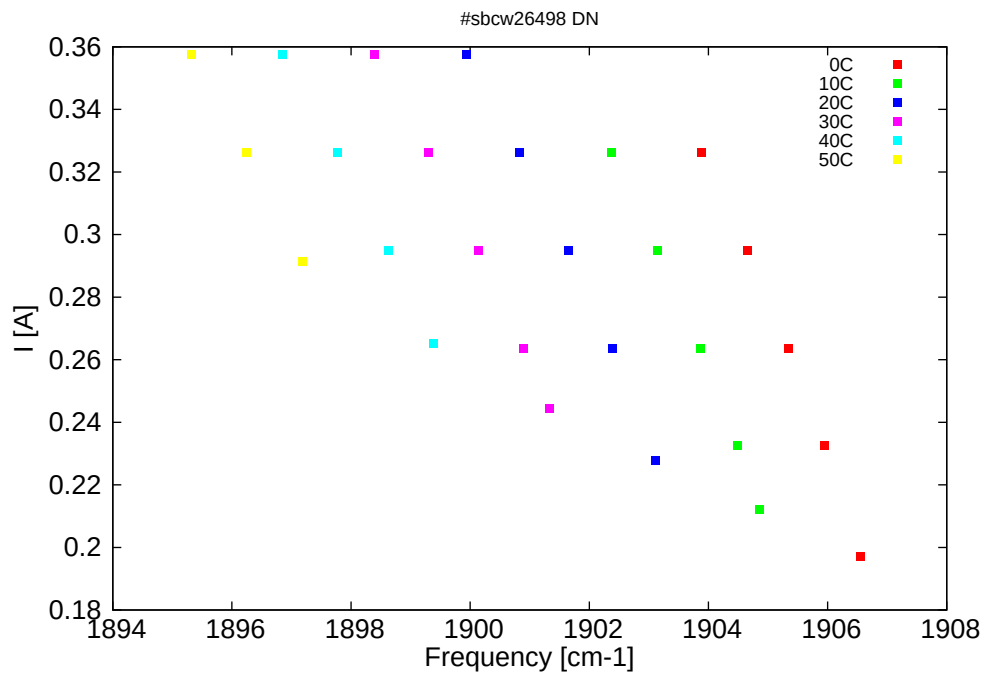


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
5245.1	1906.5	0.2	0	7.98	0.197
5246.7	1905.9	26.5	0	8.17	0.233
5248.4	1905.3	52.1	0	8.37	0.264
5250.3	1904.7	72.4	0	8.58	0.295
5252.4	1903.9	87	0	8.8	0.326
5249.7	1904.9	0.7	10	7.99	0.212
5250.8	1904.5	13.5	10	8.1	0.233
5252.5	1903.9	36.1	10	8.29	0.264
5254.4	1903.2	54.8	10	8.5	0.295
5256.6	1902.4	68	10	8.72	0.326
5254.5	1903.1	0.9	20	8.01	0.228
5256.6	1902.4	21.3	20	8.22	0.264
5258.6	1901.7	38.2	20	8.42	0.295
5260.9	1900.8	50.9	20	8.63	0.326
5263.3	1899.9	59.3	20	8.86	0.357
5259.5	1901.3	0.7	30	8.03	0.244
5260.7	1900.9	9	30	8.14	0.264
5262.8	1900.1	23.7	30	8.34	0.295
5265.1	1899.3	35.7	30	8.55	0.326
5267.6	1898.4	43.9	30	8.77	0.357
5264.9	1899.4	0.7	40	8.08	0.265
5267	1898.6	11.3	40	8.26	0.295
5269.3	1897.8	22	40	8.46	0.326
5271.9	1896.8	30	40	8.68	0.357
5271	1897.2	0.6	50	8.15	0.291
5273.6	1896.2	10	50	8.37	0.326
5276.2	1895.3	17.3	50	8.58	0.357

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

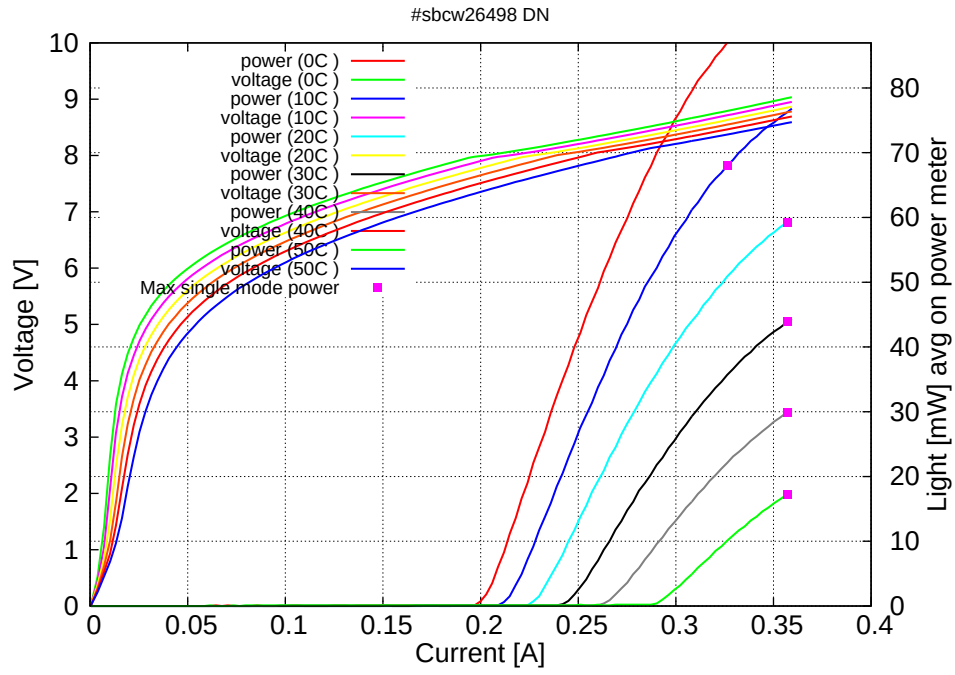


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at 0C: $I_{th}=0.20A$ / $V_{th}=8.0V$ (2-wires measurements). Maximum operation current: 0.325A between 0C and 10C, 0.36A between 20C and 50C.

Figure 3: spectra at different temperatures for various DC currents

