

Datasheet for #sbcw26062 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.

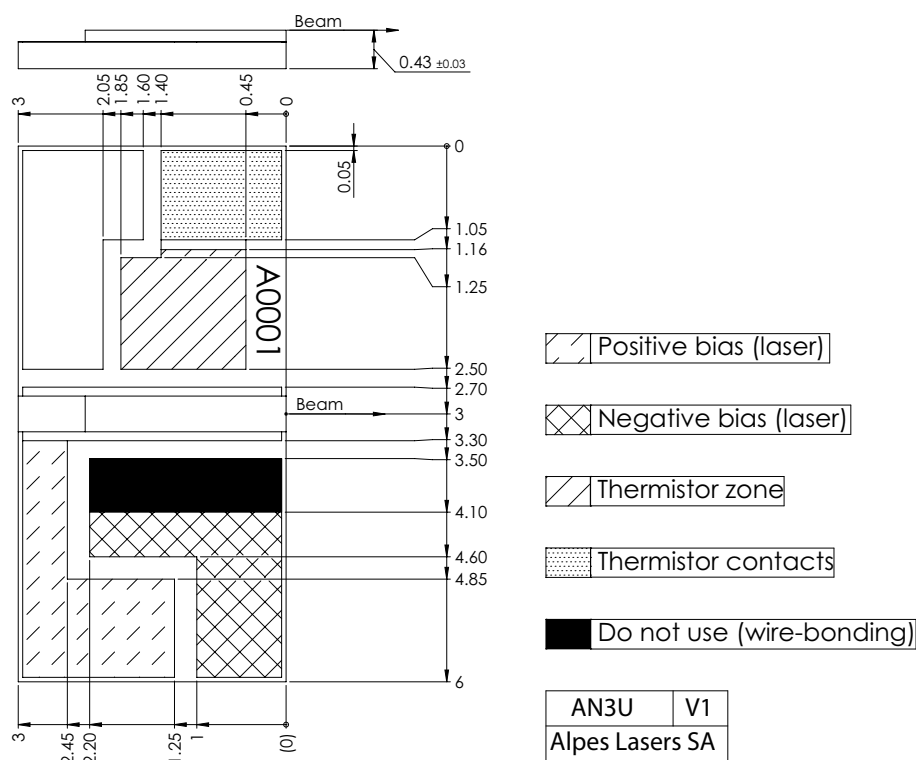


Figure 1: Mechanical and electrical interface for #sbcw26062 DN (please note that AlN submount numbering is A0V2C)

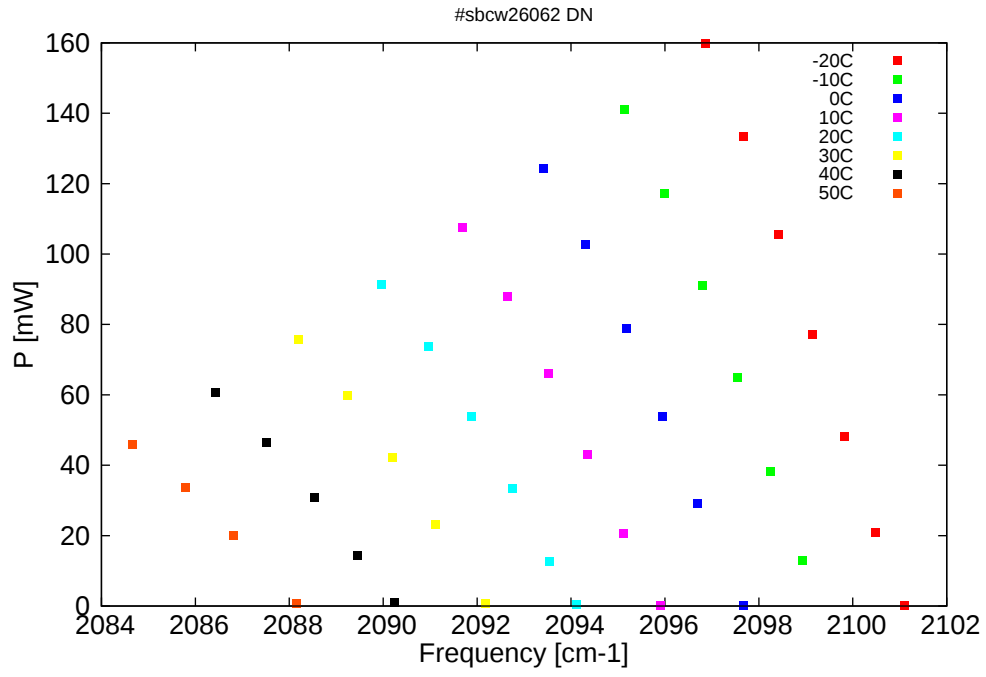


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

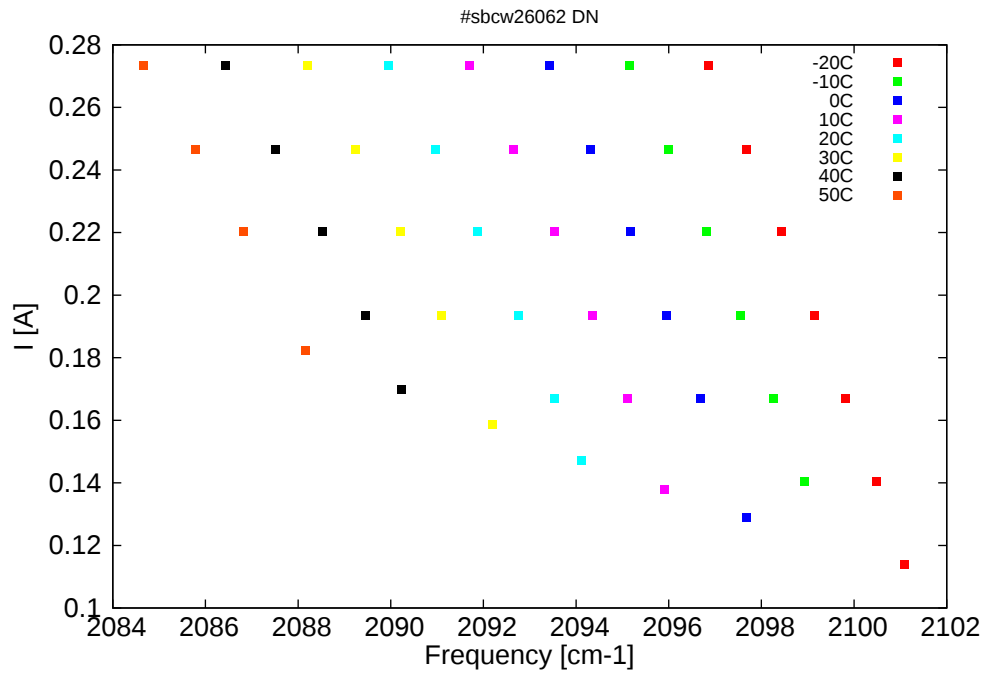


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
4759.4	2101.1	0	-20	11.04	0.114
4760.8	2100.5	21	-20	11.09	0.141
4762.3	2099.8	48.1	-20	11.23	0.167
4763.8	2099.1	77.1	-20	11.38	0.194
4765.5	2098.4	105.5	-20	11.56	0.22
4767.2	2097.7	133.4	-20	11.76	0.247
4769	2096.9	159.7	-20	11.98	0.273
4764.3	2098.9	12.9	-10	11.03	0.141
4765.9	2098.3	38.4	-10	11.17	0.167
4767.5	2097.5	65	-10	11.33	0.194
4769.2	2096.8	91.1	-10	11.52	0.22
4771	2096	117.3	-10	11.72	0.247
4772.9	2095.1	141	-10	11.95	0.273
4767.2	2097.7	0.1	0	10.96	0.129
4769.4	2096.7	29.2	0	11.11	0.167
4771.1	2096	53.7	0	11.27	0.194
4772.9	2095.2	78.9	0	11.46	0.22
4774.8	2094.3	102.7	0	11.67	0.247
4776.9	2093.4	124.4	0	11.89	0.273
4771.2	2095.9	0.2	10	10.94	0.138
4773	2095.1	20.7	10	11.06	0.167
4774.7	2094.4	43	10	11.22	0.194
4776.6	2093.5	66	10	11.41	0.22
4778.6	2092.7	88	10	11.62	0.247
4780.8	2091.7	107.5	10	11.85	0.273
4775.3	2094.1	0.3	20	10.94	0.147
4776.6	2093.5	12.6	20	11.02	0.167
4778.4	2092.8	33.2	20	11.17	0.194
4780.4	2091.9	53.9	20	11.36	0.22
4782.5	2091	73.9	20	11.57	0.247
4784.8	2090	91.4	20	11.8	0.273
4779.7	2092.2	0.8	30	10.96	0.159
4782.2	2091.1	23.2	30	11.14	0.194
4784.2	2090.2	42.1	30	11.33	0.22
4786.4	2089.2	59.9	30	11.54	0.247
4788.8	2088.2	75.8	30	11.78	0.273
4784.2	2090.2	0.9	40	11.01	0.17
4785.9	2089.5	14.2	40	11.11	0.194
4788	2088.5	30.8	40	11.3	0.22
4790.4	2087.5	46.5	40	11.5	0.247
4792.9	2086.4	60.6	40	11.74	0.273
4788.9	2088.2	0.8	50	11.06	0.182
4792	2086.8	20	50	11.27	0.22
4794.4	2085.8	33.6	50	11.47	0.247
4796.9	2084.7	46	50	11.71	0.273

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

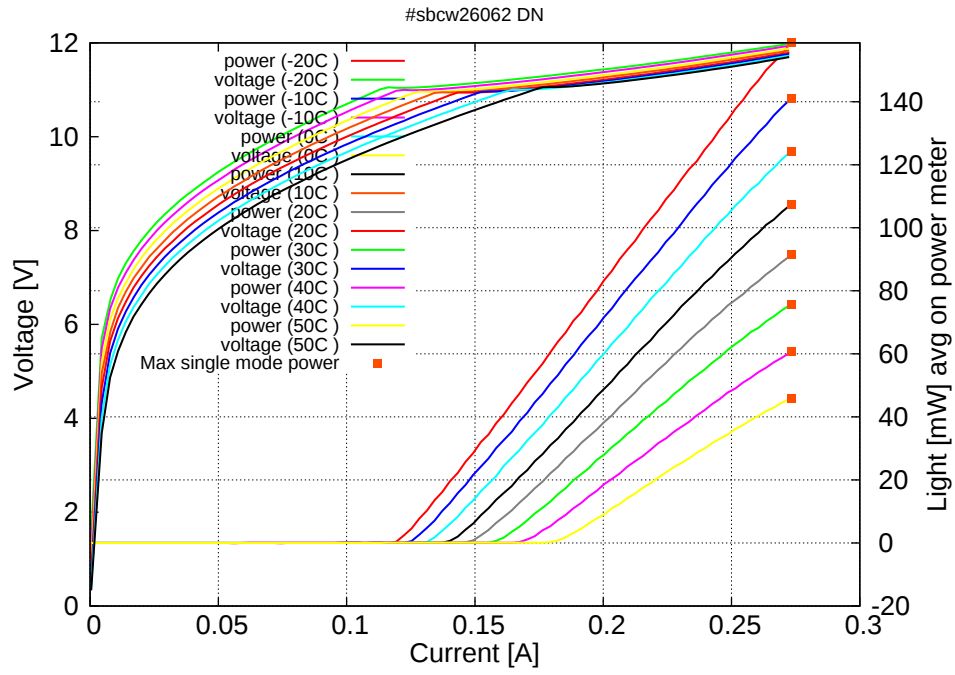


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.12A$ / $V_{th}=11.0V$ (2-wires measurements). Maximum operation current: 0.275A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

