

Datasheet for #sbcw26072 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.

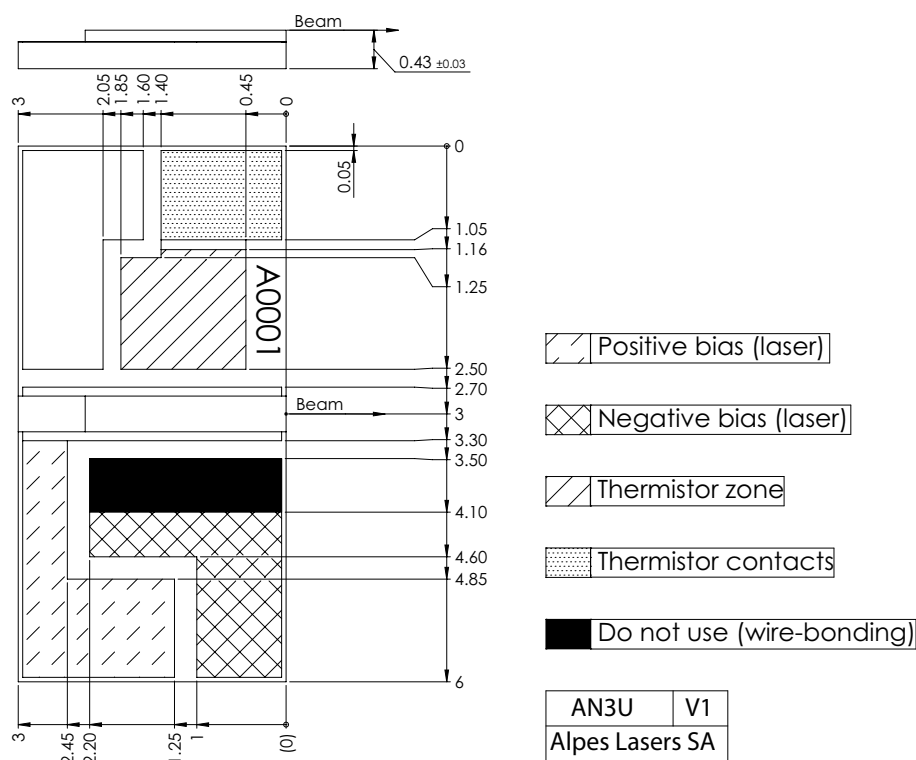


Figure 1: Mechanical and electrical interface for #sbcw26072 DN (please note that AlN submount numbering is A0U8A)

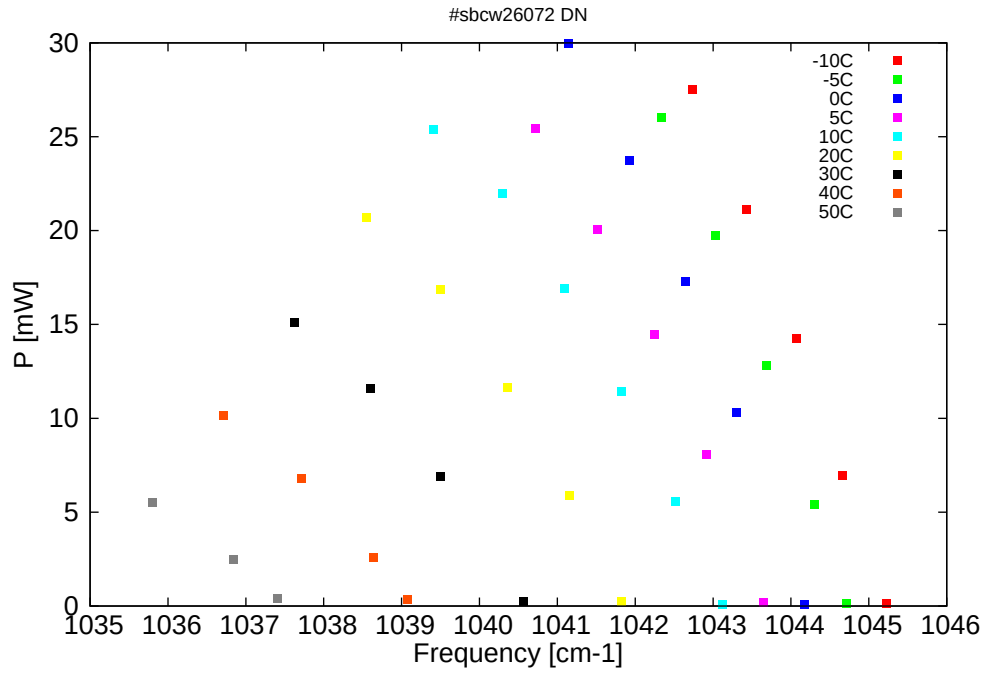


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

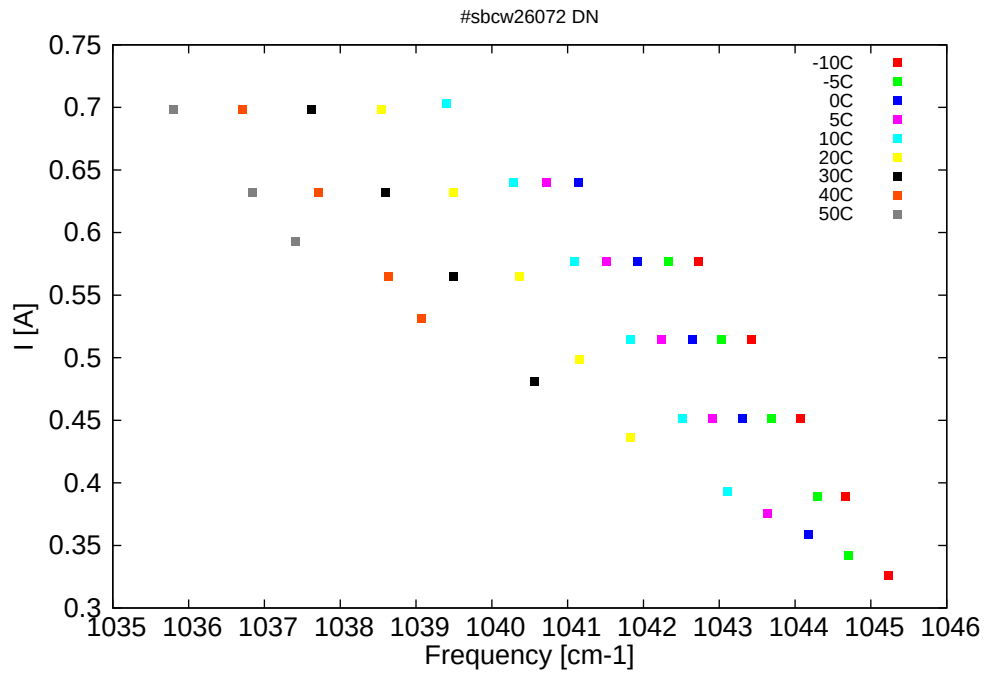


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
9567.3	1045.2	0.1	-10	8.69	0.326
9572.4	1044.7	6.9	-10	9.04	0.389
9577.8	1044.1	14.3	-10	9.38	0.452
9583.8	1043.4	21.1	-10	9.71	0.514
9590.2	1042.7	27.5	-10	10.04	0.577
9572	1044.7	0.2	-5	8.73	0.342
9575.8	1044.3	5.4	-5	8.99	0.389
9581.4	1043.7	12.8	-5	9.34	0.452
9587.4	1043	19.7	-5	9.67	0.514
9593.8	1042.3	26	-5	10	0.577
9576.9	1044.2	0.1	0	8.78	0.358
9584.9	1043.3	10.3	0	9.3	0.452
9591	1042.6	17.3	0	9.63	0.514
9597.6	1041.9	23.7	0	9.96	0.577
9604.8	1041.1	30	0	10.29	0.64
9581.8	1043.6	0.2	5	8.84	0.376
9588.5	1042.9	8.1	5	9.26	0.452
9594.7	1042.2	14.4	5	9.59	0.514
9601.4	1041.5	20.1	5	9.93	0.577
9608.7	1040.7	25.4	5	10.25	0.64
9586.7	1043.1	0.1	10	8.89	0.393
9592.1	1042.5	5.6	10	9.22	0.452
9598.5	1041.8	11.4	10	9.56	0.514
9605.3	1041.1	16.9	10	9.89	0.577
9612.7	1040.3	22	10	10.22	0.64
9620.9	1039.4	25.4	10	10.55	0.703
9598.5	1041.8	0.3	20	9	0.437
9604.7	1041.2	5.9	20	9.34	0.499
9612.1	1040.4	11.7	20	9.69	0.565
9620	1039.5	16.9	20	10.04	0.632
9628.8	1038.5	20.7	20	10.39	0.698
9610.2	1040.6	0.2	30	9.18	0.481
9620.1	1039.5	6.9	30	9.64	0.565
9628.3	1038.6	11.6	30	9.99	0.632
9637.4	1037.6	15.1	30	10.34	0.698
9623.9	1039.1	0.3	40	9.39	0.532
9628	1038.6	2.6	40	9.56	0.565
9636.6	1037.7	6.8	40	9.92	0.632
9645.9	1036.7	10.2	40	10.27	0.698
9639.4	1037.4	0.4	50	9.64	0.593
9644.7	1036.8	2.5	50	9.85	0.632
9654.3	1035.8	5.5	50	10.21	0.698

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

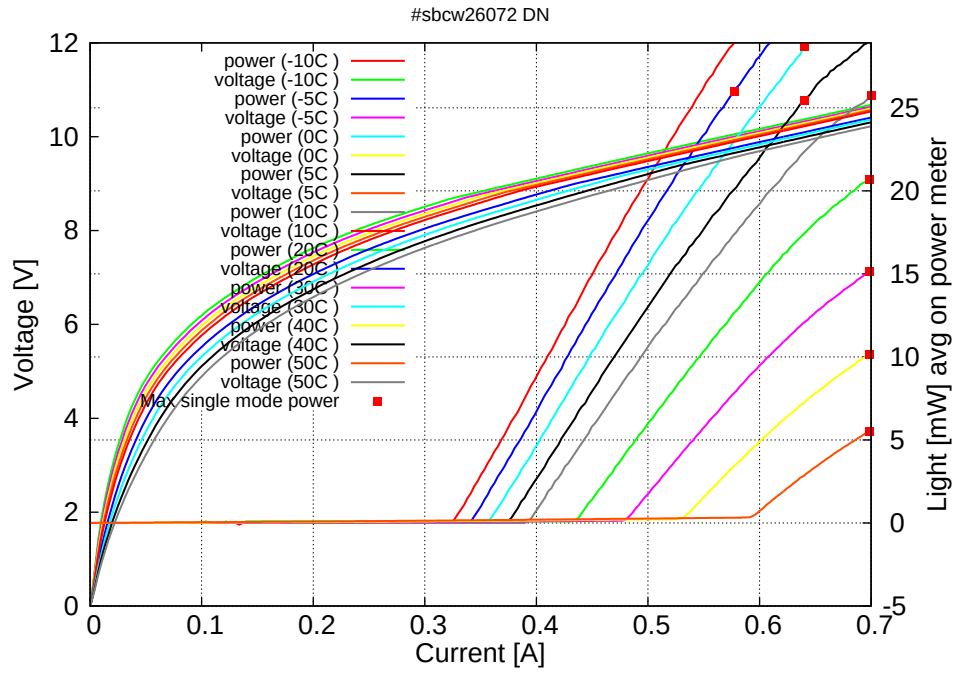


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -10C: $I_{th}=0.32A$ / $V_{th}=8.7V$ (2-wires measurements). Maximum operation current: 0.58A between -10C and -5C, 0.64A between 0C and 5C, 0.70A between 10C and 50C.

[illegible]