

Datasheet for #sbcw25882 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.

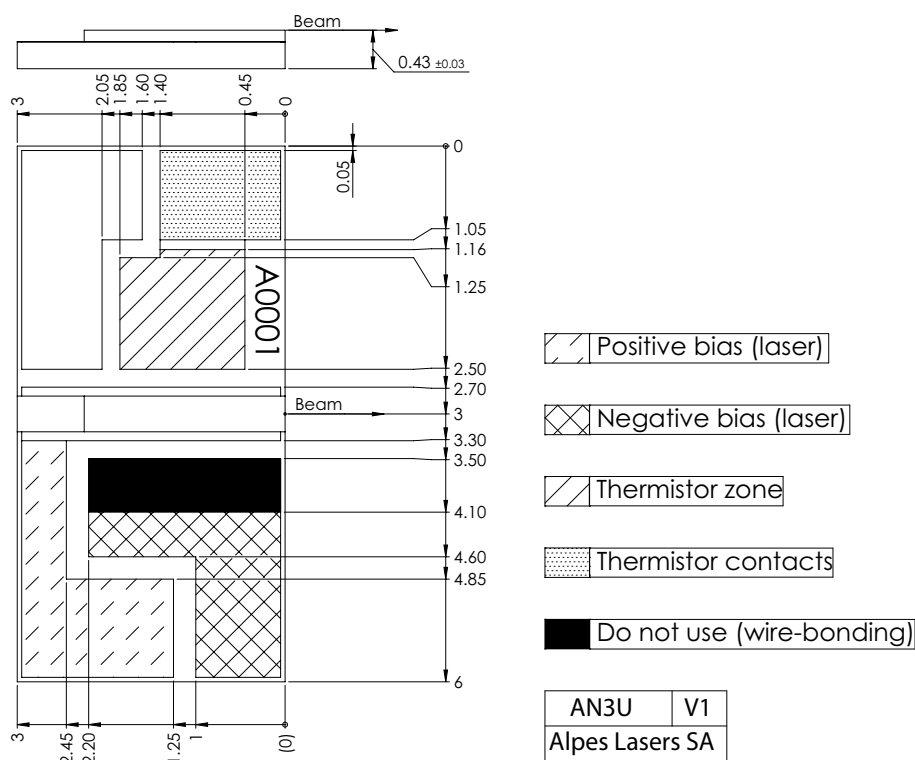


Figure 1: Mechanical and electrical interface for #sbcw25882 DN (please note that AlN submount numbering is A0VY2)

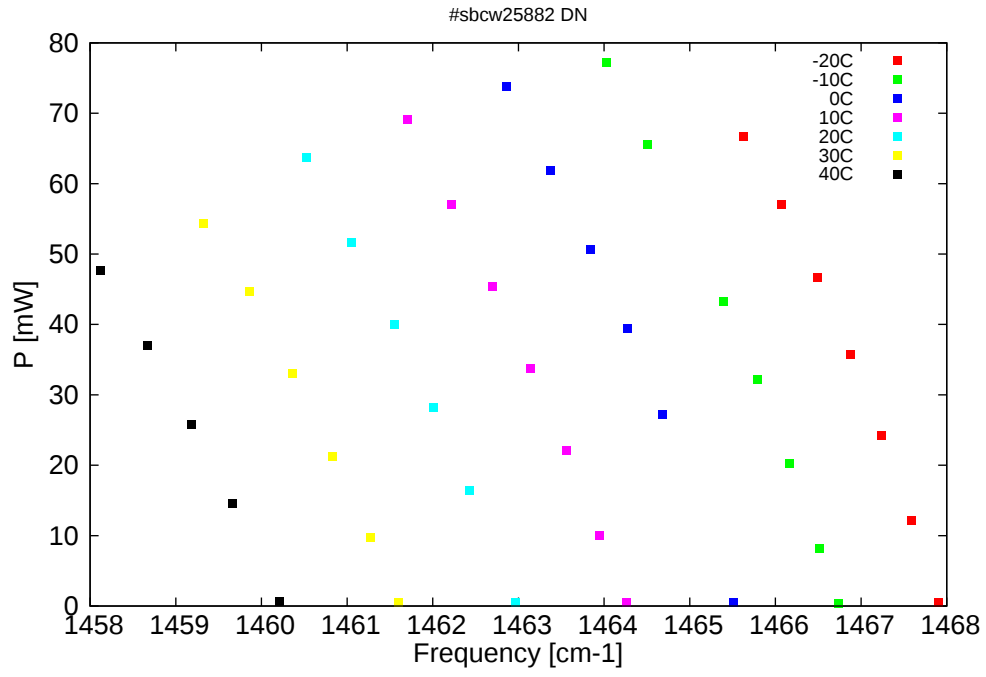


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

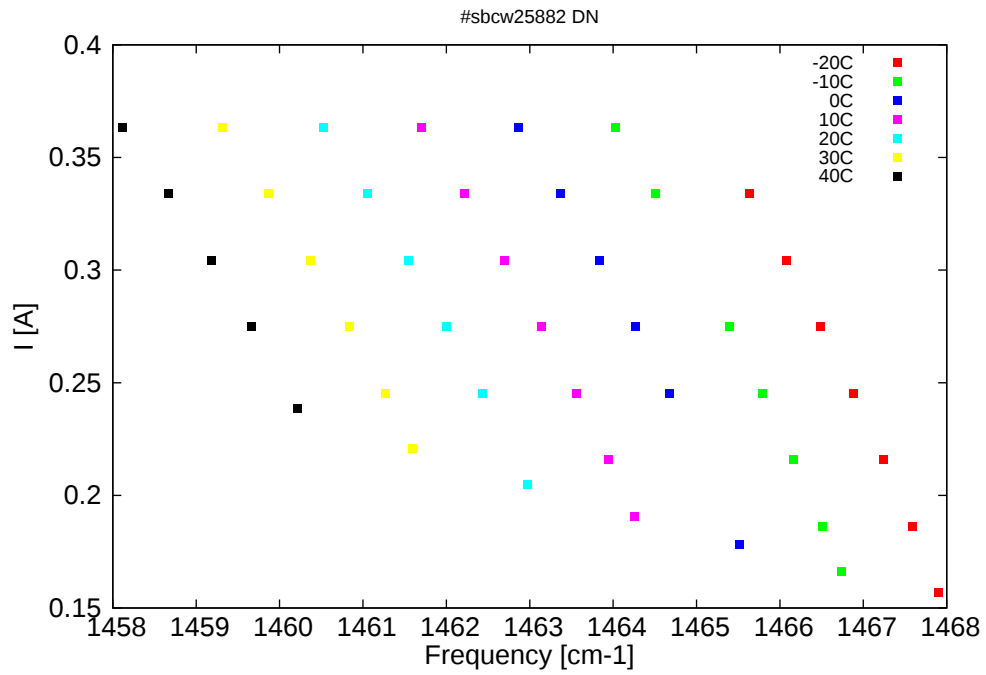


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
6812.4	1467.9	0.6	-20	9.88	0.157
6813.9	1467.6	12.2	-20	10.14	0.186
6815.5	1467.2	24.2	-20	10.39	0.216
6817.2	1466.9	35.8	-20	10.62	0.245
6819	1466.5	46.7	-20	10.85	0.275
6820.9	1466.1	57.1	-20	11.08	0.304
6823	1465.6	66.7	-20	11.3	0.334
6817.9	1466.7	0.4	-10	9.82	0.166
6818.9	1466.5	8.2	-10	10	0.186
6820.5	1466.2	20.3	-10	10.25	0.216
6822.3	1465.8	32.2	-10	10.49	0.245
6824.1	1465.4	43.3	-10	10.72	0.275
6828.2	1464.5	65.6	-10	11.18	0.334
6830.5	1464	77.2	-10	11.41	0.364
6823.5	1465.5	0.5	0	9.79	0.178
6827.4	1464.7	27.1	0	10.37	0.245
6829.3	1464.3	39.4	0	10.61	0.275
6831.3	1463.8	50.6	0	10.84	0.304
6833.5	1463.4	61.9	0	11.08	0.334
6835.9	1462.9	73.8	0	11.31	0.364
6829.4	1464.3	0.5	10	9.78	0.191
6830.8	1463.9	10.1	10	10	0.216
6832.7	1463.6	22.1	10	10.25	0.245
6834.6	1463.1	33.7	10	10.5	0.275
6836.7	1462.7	45.4	10	10.73	0.304
6838.9	1462.2	57.1	10	10.97	0.334
6841.3	1461.7	69.1	10	11.21	0.364
6835.4	1463	0.5	20	9.79	0.205
6837.9	1462.4	16.4	20	10.14	0.245
6839.9	1462	28.2	20	10.38	0.275
6842.1	1461.5	40	20	10.63	0.304
6844.4	1461.1	51.6	20	10.87	0.334
6846.9	1460.5	63.7	20	11.12	0.364
6841.8	1461.6	0.5	30	9.82	0.221
6843.4	1461.3	9.7	30	10.03	0.245
6845.4	1460.8	21.3	30	10.28	0.275
6847.6	1460.4	33.1	30	10.52	0.304
6849.9	1459.9	44.7	30	10.76	0.334
6852.5	1459.3	54.4	30	11.01	0.364
6848.3	1460.2	0.6	40	9.87	0.238
6850.9	1459.7	14.5	40	10.17	0.275
6853.1	1459.2	25.7	40	10.42	0.304
6855.6	1458.7	37	40	10.67	0.334
6858.2	1458.1	47.7	40	10.92	0.364

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

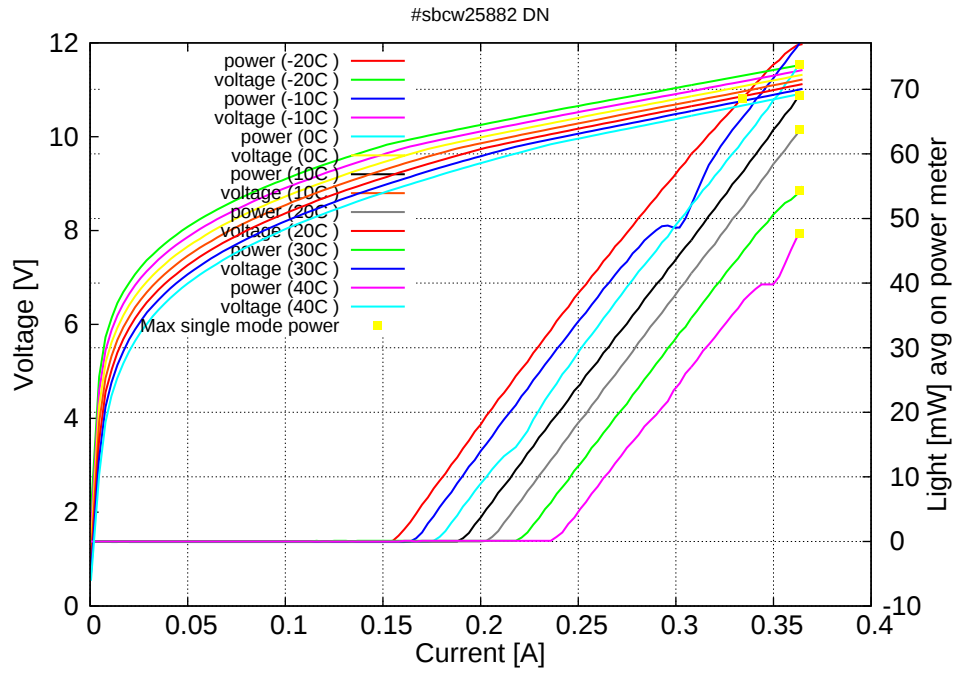


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.15A$ / $V_{th}=9.9V$ (2-wires measurements). Maximum operation current: 0.335A at -20C, 0.365A between -10C and 40C.

