

**Datasheet for #sbcw25032 DN**

Recommendations:

Please read the User Manual and have a look at the FAQ at <http://www.alpeslasers.ch/?a=142>

**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 #sbcw25032 DN (please note that AlN submount numbering is A122L)

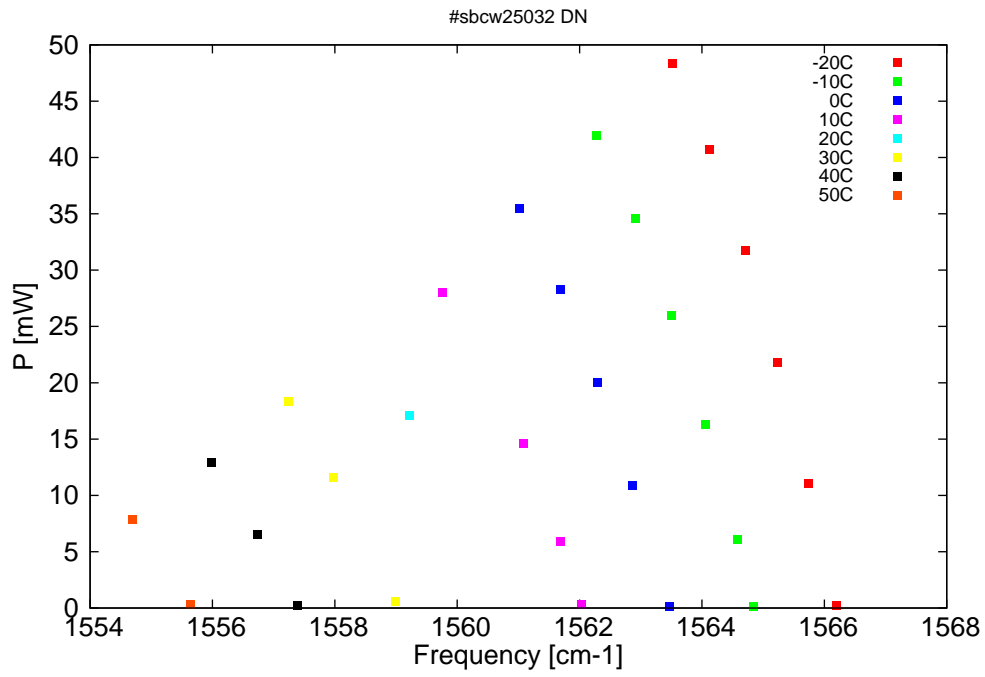


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

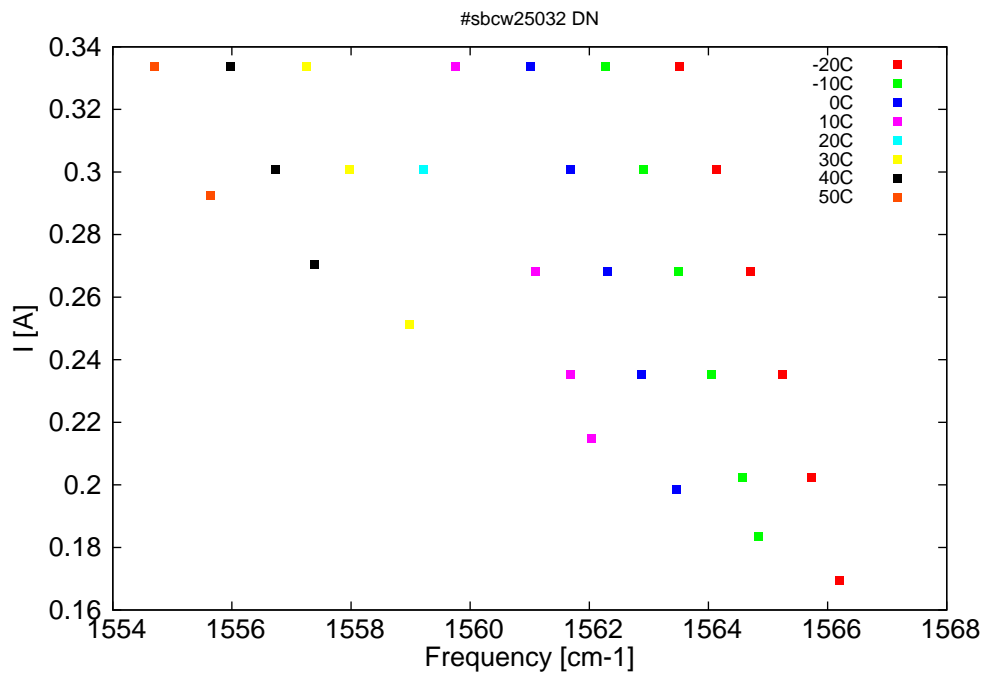


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda$ [nm]	$\nu$ [cm <sup>-1</sup> ]	P[mW]	Temp[°C]	$U_{LASER}$ [V]	I[A]
6384.9	1566.2	0.2	-20	8.53	0.17
6386.8	1565.7	11.1	-20	8.81	0.202
6388.8	1565.2	21.8	-20	9.08	0.235
6391	1564.7	31.7	-20	9.36	0.268
6393.3	1564.1	40.7	-20	9.63	0.301
6395.8	1563.5	48.4	-20	9.93	0.334
6390.4	1564.8	0.2	-10	8.56	0.184
6391.5	1564.6	6.1	-10	8.73	0.202
6393.6	1564.1	16.3	-10	9	0.235
6395.9	1563.5	26	-10	9.28	0.268
6398.3	1562.9	34.6	-10	9.56	0.301
6400.9	1562.3	42	-10	9.86	0.334
6396	1563.5	0.1	0	8.61	0.199
6398.5	1562.9	10.9	0	8.93	0.235
6400.8	1562.3	20	0	9.21	0.268
6403.3	1561.7	28.3	0	9.5	0.301
6406.1	1561	35.5	0	9.8	0.334
6401.9	1562	0.3	10	8.67	0.215
6403.3	1561.7	5.9	10	8.85	0.235
6405.8	1561.1	14.6	10	9.14	0.268
6411.3	1559.8	28	10	9.74	0.334
6413.5	1559.2	17.1	20	9.37	0.301
6414.4	1559	0.6	30	8.85	0.251
6418.6	1558	11.6	30	9.3	0.301
6421.6	1557.3	18.4	30	9.6	0.334
6421	1557.4	0.2	40	8.95	0.271
6423.7	1556.7	6.5	40	9.23	0.301
6426.8	1556	12.9	40	9.54	0.334
6428.2	1555.6	0.3	50	9.09	0.293
6432.1	1554.7	7.8	50	9.47	0.334

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

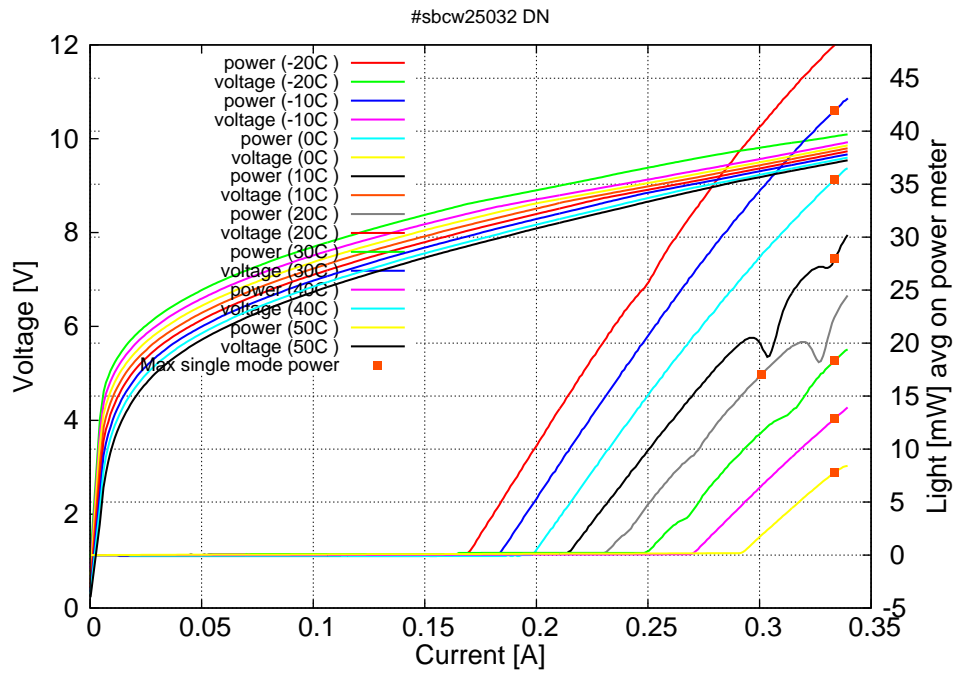


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C:  $I_{th}=0.17A$  /  $V_{th}=8.5V$  (2-wires measurements). Maximum operation current: 0.340A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

