

**Datasheet for #sbcw27323 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.

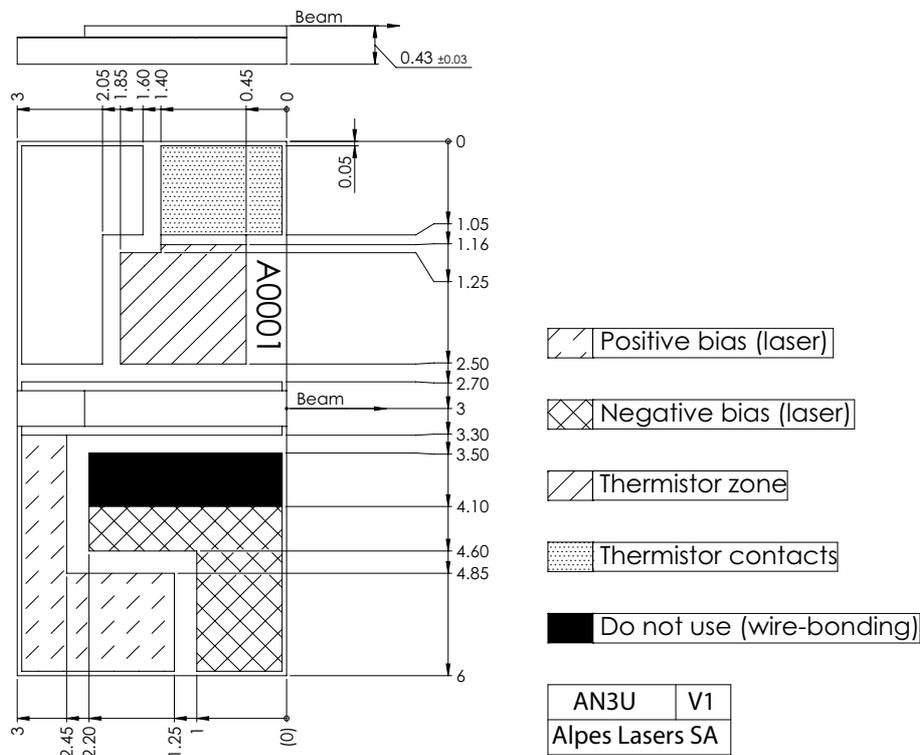


Figure 1: Mechanical and electrical interface for #sbcw27323 DN (please note that AlN submount numbering is A0YLJ)

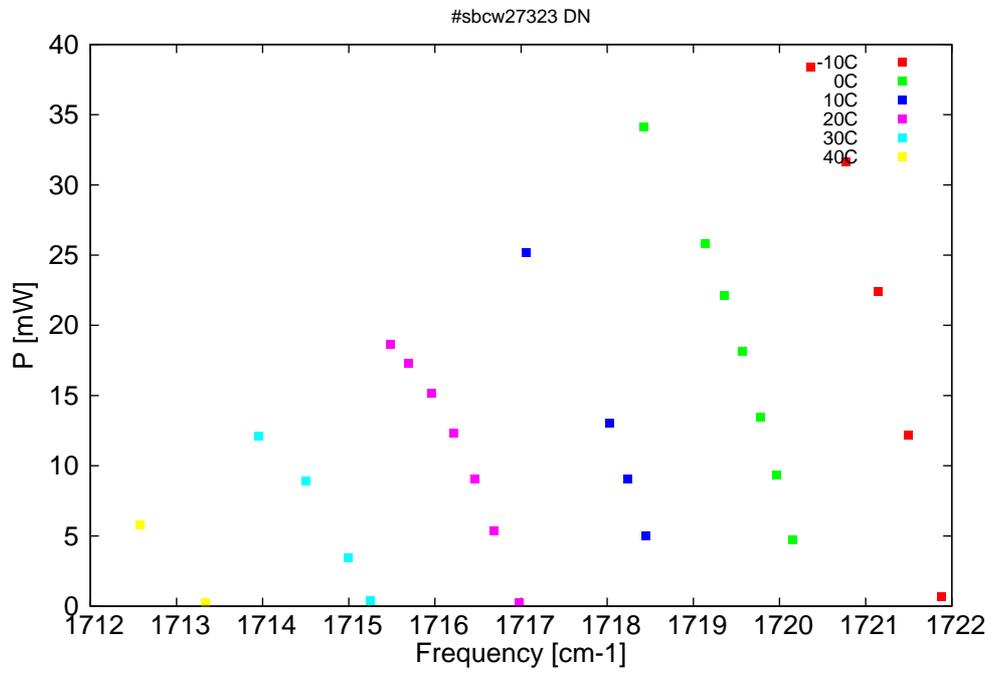


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

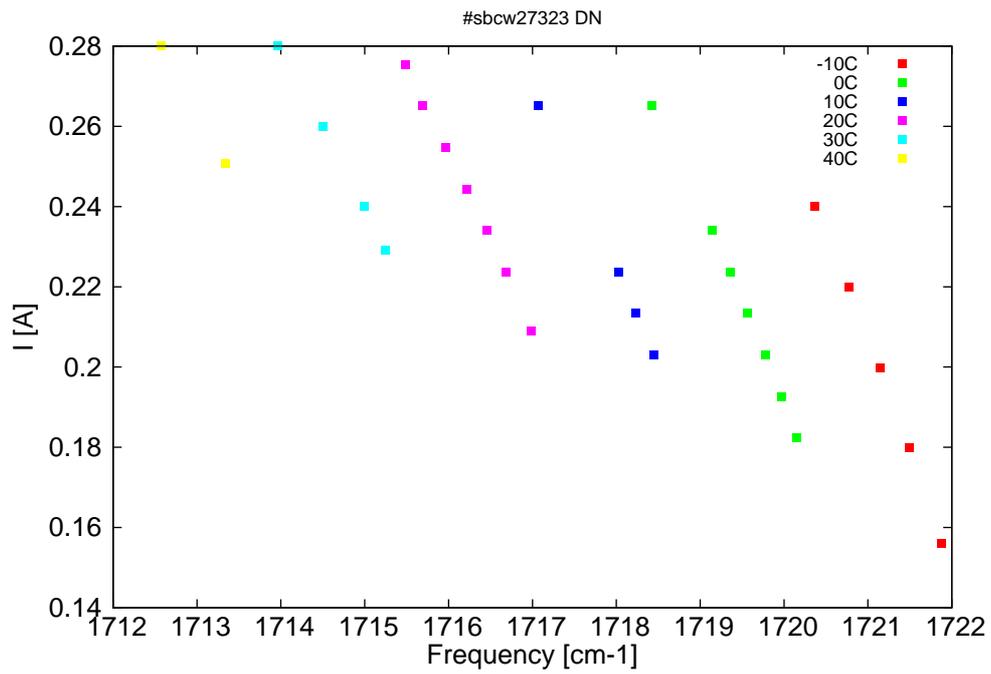


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda$ [nm]	$\nu$ [cm <sup>-1</sup> ]	P[mW]	Temp[°C]	$U_{LASER}$ [V]	I[A]
5807.6	1721.9	0.7	-10	7.92	0.156
5808.9	1721.5	12.2	-10	8.2	0.18
5810.1	1721.1	22.4	-10	8.44	0.2
5811.3	1720.8	31.7	-10	8.7	0.22
5812.7	1720.4	38.4	-10	8.97	0.24
5813.4	1720.2	4.7	0	8.22	0.182
5814.1	1720	9.3	0	8.38	0.193
5814.7	1719.8	13.5	0	8.51	0.203
5815.4	1719.6	18.2	0	8.65	0.213
5816.1	1719.4	22.1	0	8.78	0.224
5816.9	1719.1	25.8	0	8.92	0.234
5819.3	1718.4	34.1	0	9.36	0.265
5819.2	1718.5	5	10	8.45	0.203
5819.9	1718.2	9.1	10	8.58	0.213
5820.6	1718	13	10	8.72	0.224
5823.9	1717.1	25.2	10	9.28	0.265
5824.2	1717	0.3	20	8.47	0.209
5825.2	1716.7	5.4	20	8.66	0.224
5825.9	1716.5	9.1	20	8.79	0.234
5826.8	1716.2	12.3	20	8.93	0.244
5827.6	1716	15.1	20	9.06	0.255
5828.6	1715.7	17.3	20	9.21	0.265
5829.3	1715.5	18.6	20	9.36	0.275
5830	1715.3	0.4	30	8.57	0.229
5830.9	1715	3.4	30	8.71	0.24
5832.6	1714.5	8.9	30	8.96	0.26
5834.4	1714	12.1	30	9.23	0.28
5836.5	1713.3	0.3	40	8.79	0.251
5839.2	1712.6	5.8	40	9.17	0.28

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

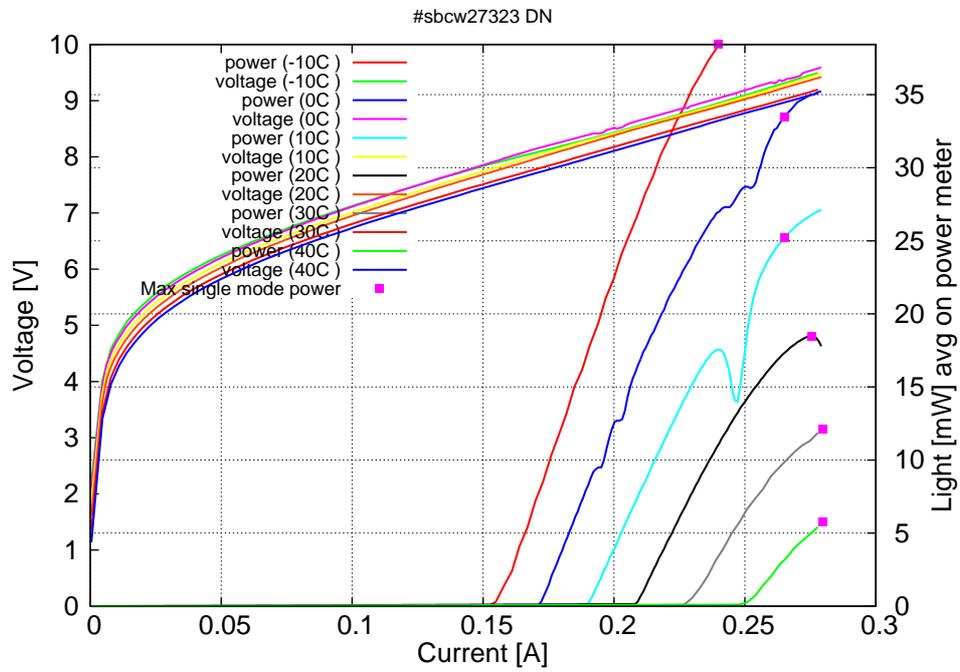


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -10C:  $I_{th}=0.15A$  /  $V_{th}=7.9V$  (2-wires measurements). Maximum operation current: 0.24A at -10C, 0.265A between 0C and 10C, 0.28A between 20C and 40C.

Figure 3: spectra at different temperatures for various DC currents

