

**Datasheet for #sbcw22576 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 #sbcw22576 DN (please note that AlN submount numbering is A0X0N)

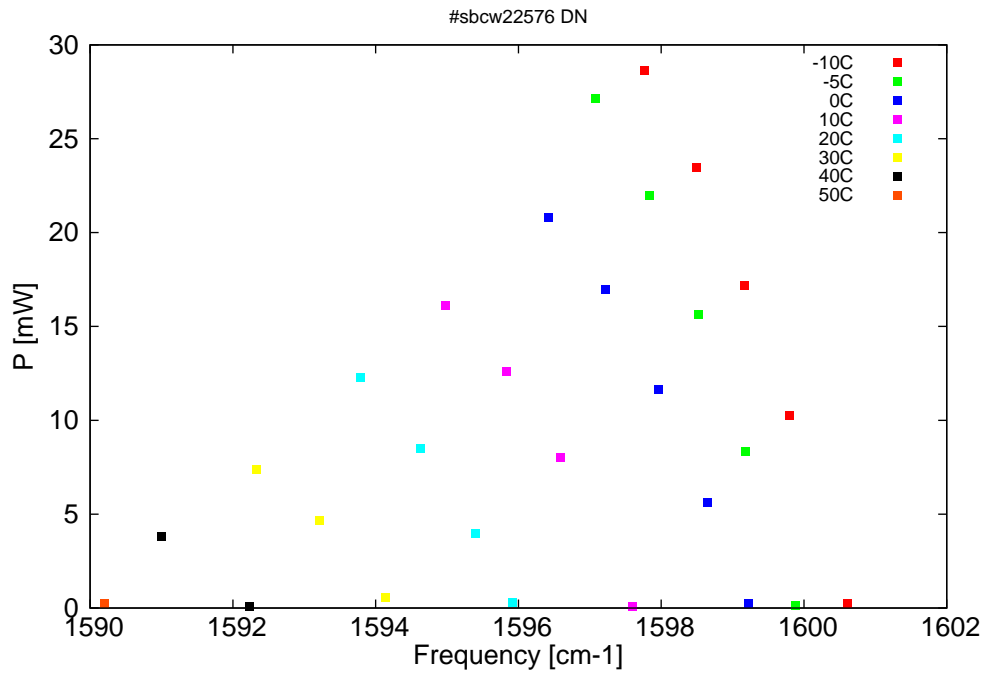


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

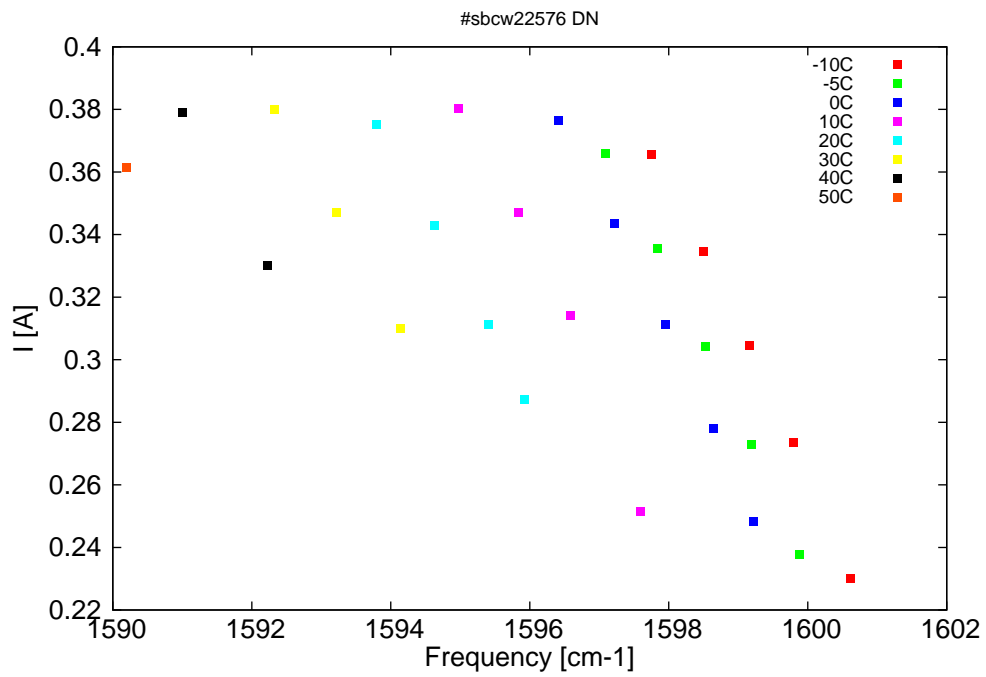


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda$ [nm]	$\nu$ [cm <sup>-1</sup> ]	P[mW]	Temp[°C]	$U_{LASER}$ [V]	I[A]
6247.6	1600.6	0.2	-10	8.8	0.23
6250.8	1599.8	10.3	-10	9.13	0.273
6253.3	1599.2	17.2	-10	9.36	0.304
6255.9	1598.5	23.4	-10	9.59	0.334
6258.8	1597.8	28.6	-10	9.84	0.366
6250.5	1599.9	0.2	-5	8.82	0.238
6253.2	1599.2	8.3	-5	9.09	0.273
6255.8	1598.5	15.6	-5	9.33	0.304
6258.5	1597.8	22	-5	9.57	0.336
6261.4	1597.1	27.1	-5	9.81	0.366
6253	1599.2	0.2	0	8.79	0.248
6255.3	1598.6	5.6	0	9.01	0.278
6258	1598	11.6	0	9.26	0.311
6260.9	1597.2	16.9	0	9.51	0.344
6264	1596.4	20.8	0	9.77	0.376
6259.4	1597.6	0.1	10	8.87	0.251
6263.3	1596.6	8	10	9.23	0.314
6266.3	1595.8	12.6	10	9.48	0.347
6269.7	1595	16.1	10	9.75	0.38
6266	1595.9	0.3	20	8.95	0.287
6268	1595.4	4	20	9.14	0.311
6271.1	1594.6	8.5	20	9.39	0.343
6274.4	1593.8	12.3	20	9.65	0.375
6273	1594.1	0.6	30	9.07	0.31
6276.6	1593.2	4.6	30	9.37	0.347
6280.1	1592.3	7.4	30	9.64	0.38
6280.5	1592.2	0.1	40	9.2	0.33
6285.4	1591	3.8	40	9.58	0.379
6288.5	1590.2	0.2	50	9.38	0.361

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

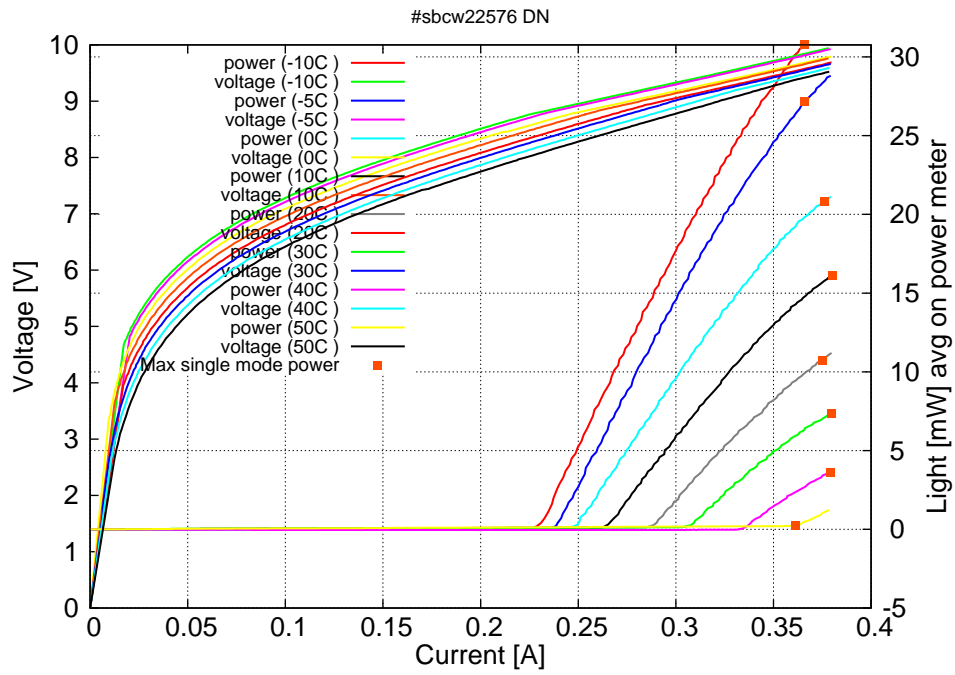


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -10C:  $I_{th}=0.23A$  /  $V_{th}=8.8V$  (2-wires measurements). Maximum operation current: 0.37A between -10C and -5C, 0.38A between 0C and 50C.

