

**Datasheet for #sbcw24267 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 #sbcw24267 DN (please note that AlN submount numbering is A0ZTT)

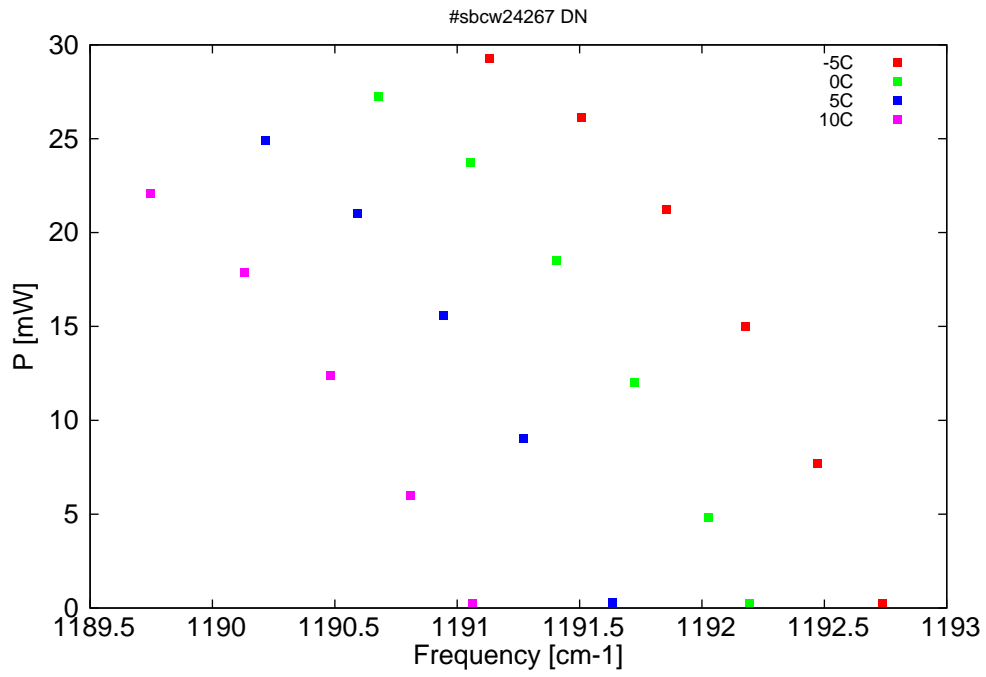


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

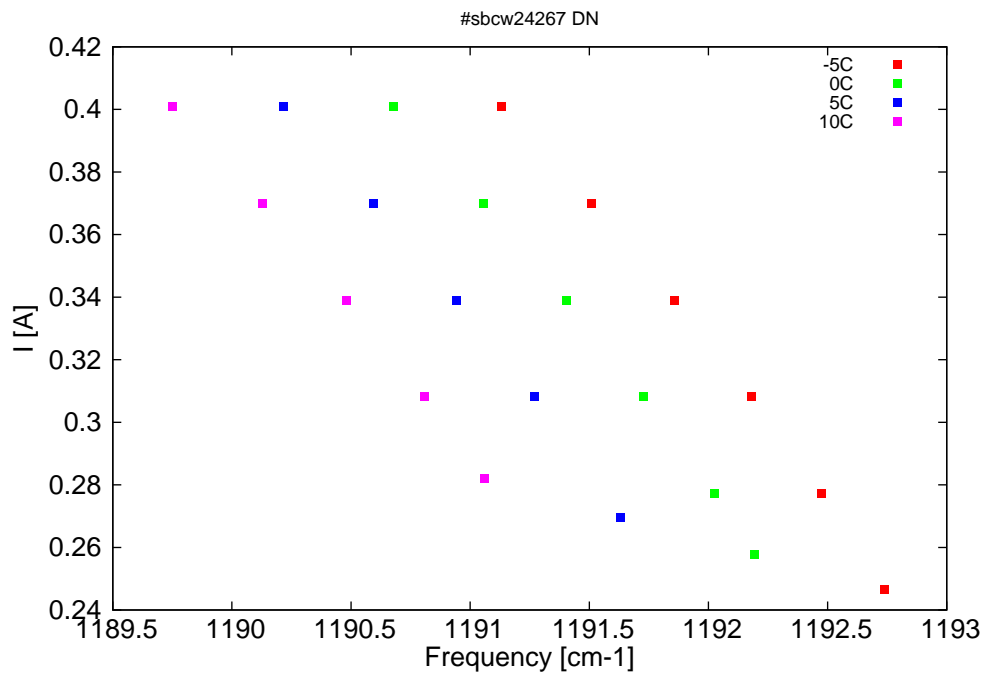


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda$ [nm]	$\nu$ [cm <sup>-1</sup> ]	P[mW]	Temp[°C]	$U_{LASER}$ [V]	I[A]
8384.1	1192.7	0.2	-5	8.81	0.247
8385.9	1192.5	7.7	-5	9.14	0.277
8388	1192.2	15	-5	9.48	0.308
8390.3	1191.9	21.2	-5	9.81	0.339
8392.7	1191.5	26.1	-5	10.14	0.37
8395.4	1191.1	29.3	-5	10.49	0.401
8387.9	1192.2	0.3	0	8.86	0.258
8389.1	1192	4.9	0	9.06	0.277
8391.2	1191.7	12	0	9.4	0.308
8393.5	1191.4	18.5	0	9.72	0.339
8395.9	1191.1	23.7	0	10.05	0.37
8398.6	1190.7	27.2	0	10.37	0.401
8391.8	1191.6	0.3	5	8.91	0.27
8394.4	1191.3	9	5	9.32	0.308
8396.7	1190.9	15.6	5	9.63	0.339
8399.2	1190.6	21	5	9.95	0.37
8401.8	1190.2	24.9	5	10.26	0.401
8395.9	1191.1	0.2	10	8.97	0.282
8397.7	1190.8	6	10	9.24	0.308
8400	1190.5	12.4	10	9.54	0.339
8402.5	1190.1	17.9	10	9.85	0.37
8405.1	1189.7	22.1	10	10.16	0.401

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

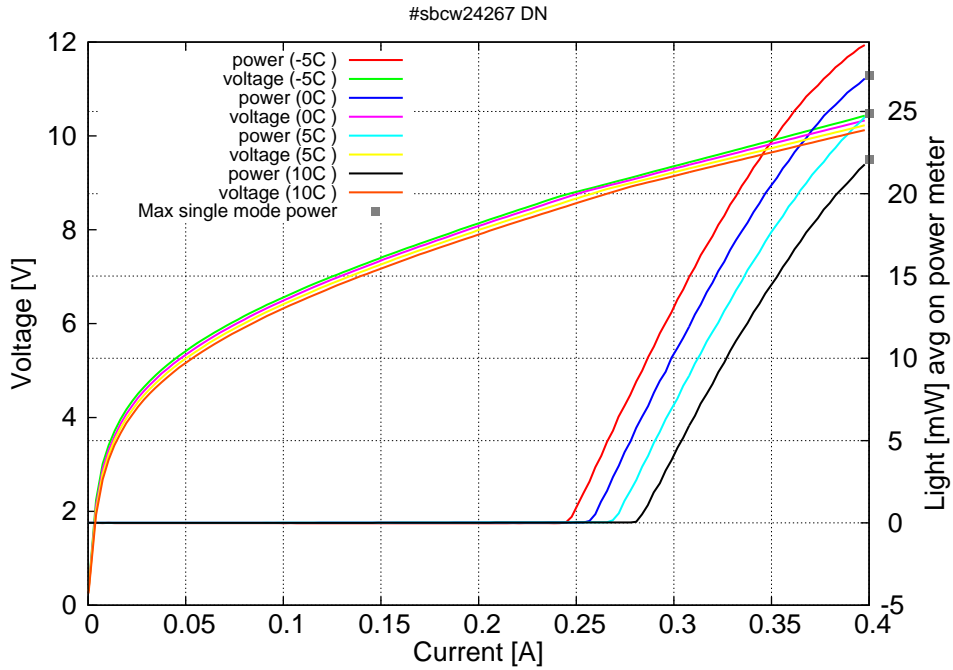


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -5C:  $I_{th}=0.24A$  /  $V_{th}=8.7V$  (2-wires measurements). Maximum operation current: 0.40A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

