

Datasheet for #sbcw26634 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 #sbcw26634 DN (please note that AlN submount numbering is A0VMD)

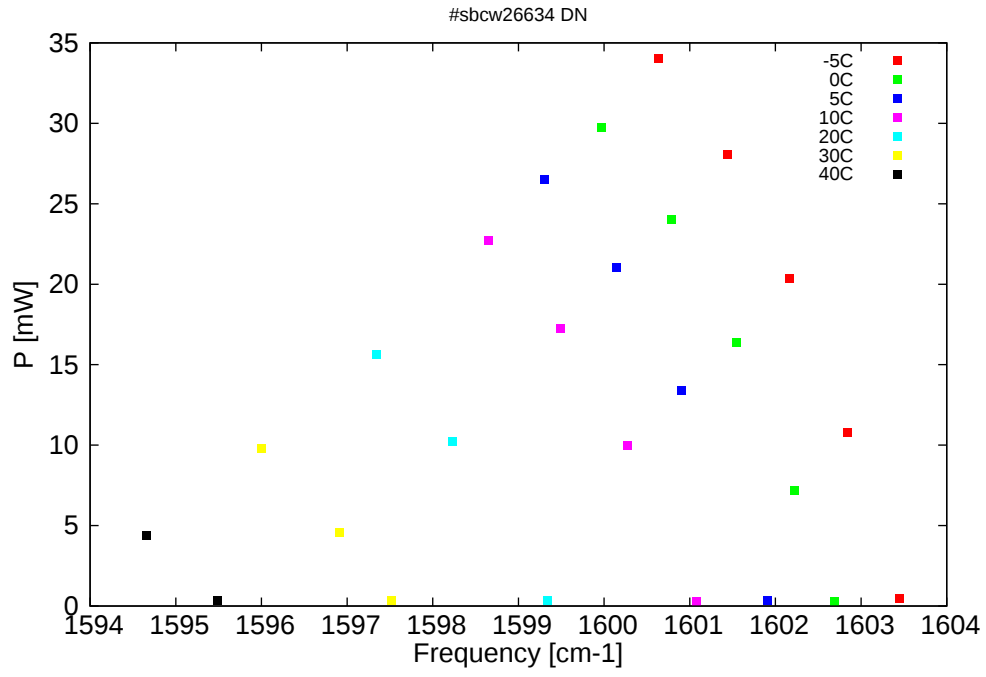


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

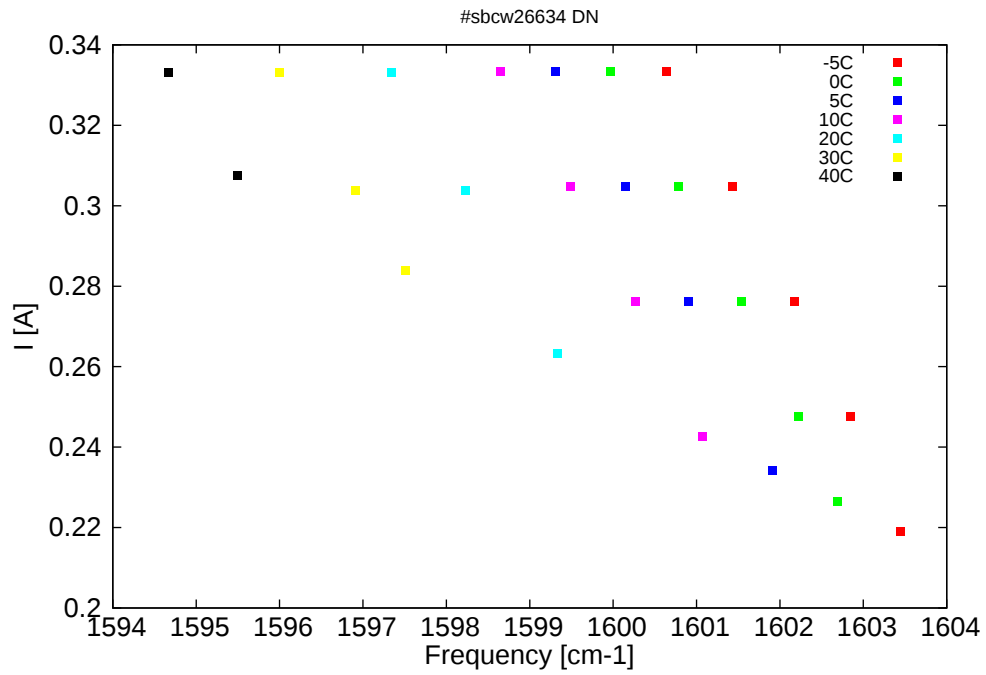


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

$\lambda[\text{nm}]$	$\nu[\text{cm}^{-1}]$	P[mW]	Temp[°C]	$U_{LASER}[\text{V}]$	I[A]
6236.6	1603.4	0.5	-5	9.27	0.219
6238.9	1602.8	10.8	-5	9.54	0.248
6241.5	1602.2	20.3	-5	9.81	0.276
6244.4	1601.4	28	-5	10.1	0.305
6247.5	1600.6	34	-5	10.39	0.334
6239.5	1602.7	0.3	0	9.31	0.227
6241.3	1602.2	7.2	0	9.51	0.248
6244	1601.5	16.4	0	9.78	0.276
6246.9	1600.8	24	0	10.07	0.305
6250.1	1600	29.7	0	10.36	0.334
6242.5	1601.9	0.4	5	9.35	0.234
6246.5	1600.9	13.4	5	9.75	0.276
6249.4	1600.2	21	5	10.04	0.305
6252.7	1599.3	26.5	5	10.34	0.334
6245.8	1601.1	0.2	10	9.4	0.243
6248.9	1600.3	10	10	9.72	0.276
6252	1599.5	17.3	10	10.01	0.305
6255.3	1598.6	22.7	10	10.31	0.334
6252.6	1599.3	0.3	20	9.53	0.263
6256.9	1598.2	10.2	20	9.94	0.304
6260.4	1597.3	15.7	20	10.24	0.333
6259.7	1597.5	0.4	30	9.67	0.284
6262.1	1596.9	4.6	30	9.87	0.304
6265.7	1596	9.8	30	10.18	0.333
6267.7	1595.5	0.3	40	9.85	0.308
6270.9	1594.7	4.4	40	10.12	0.333

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

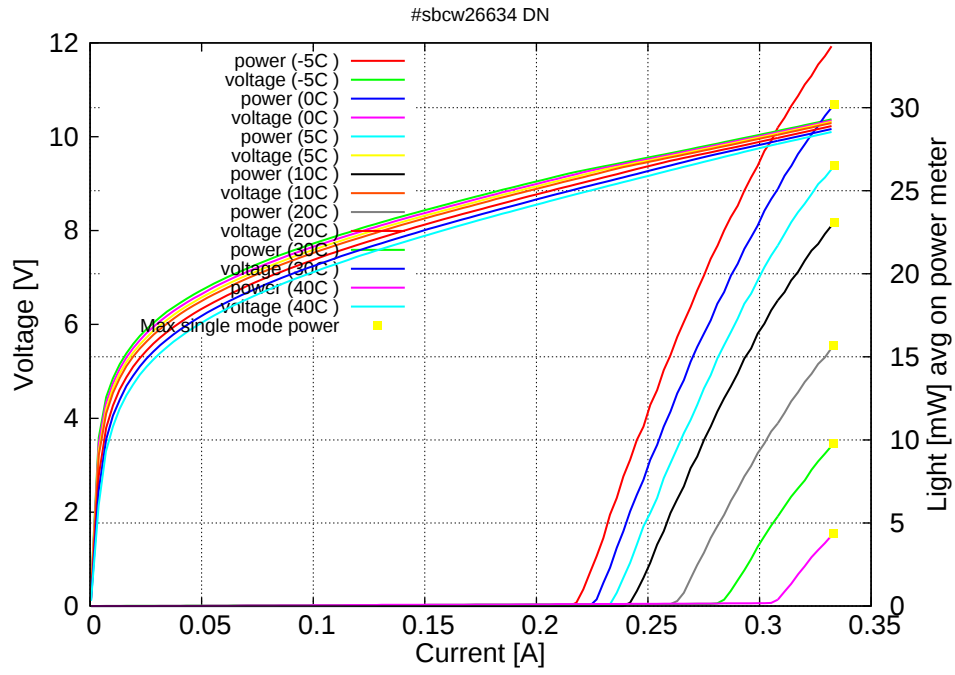


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at 0C: $I_{th}=0.22A$ / $V_{th}=9.3V$ (2-wires measurements). Maximum operation current: 0.335A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

