

Datasheet for #sbcw26852 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.

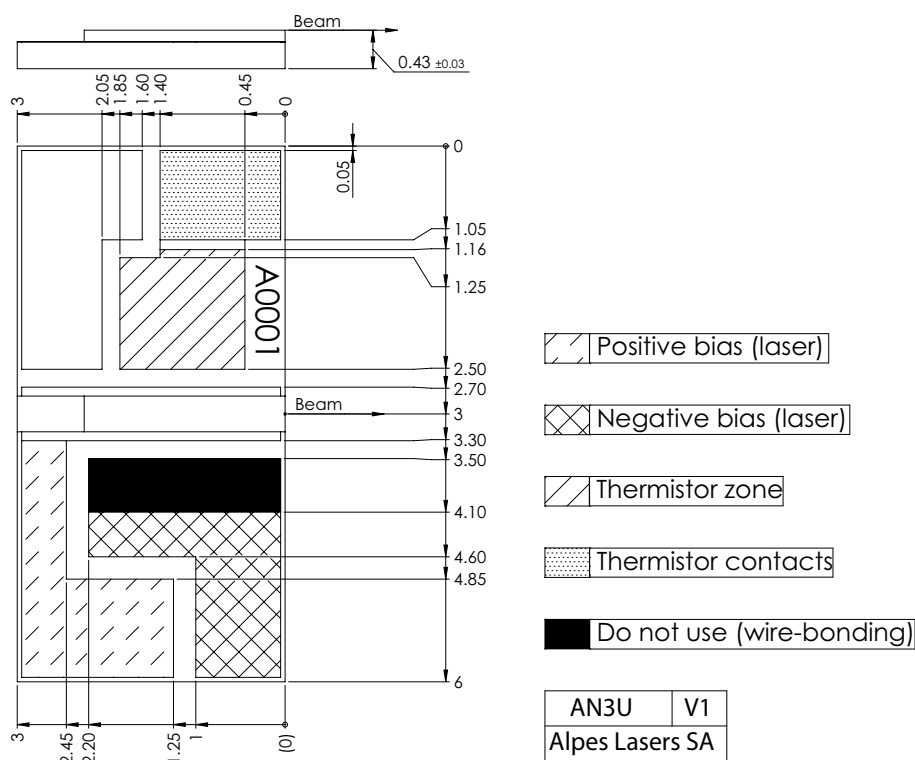


Figure 1: Mechanical and electrical interface for #sbcw26852 DN (please note that AlN submount numbering is A0UEO)

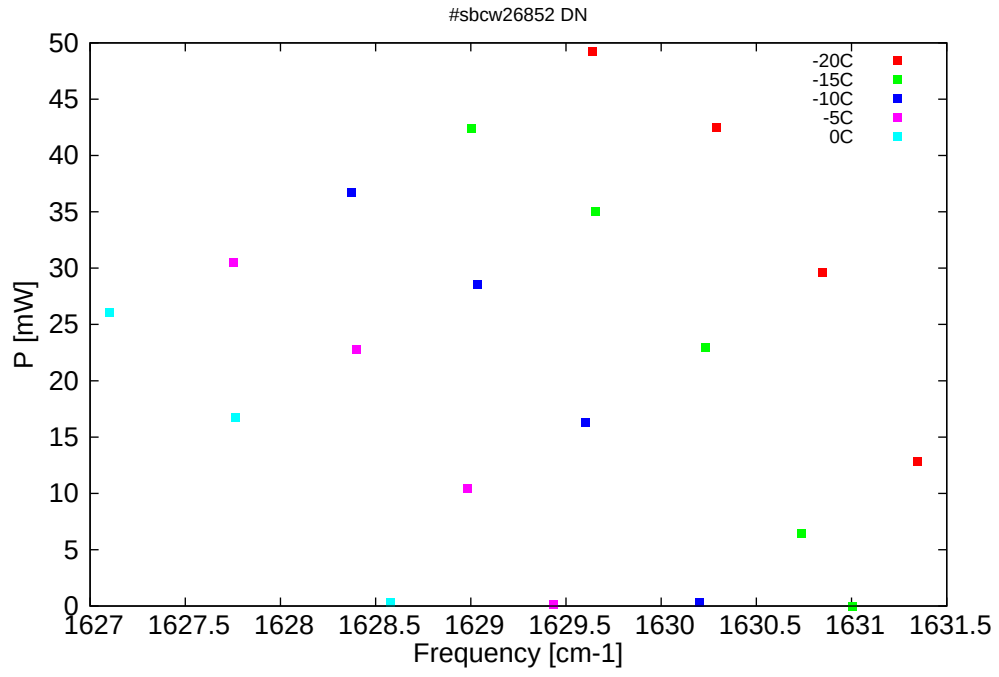


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

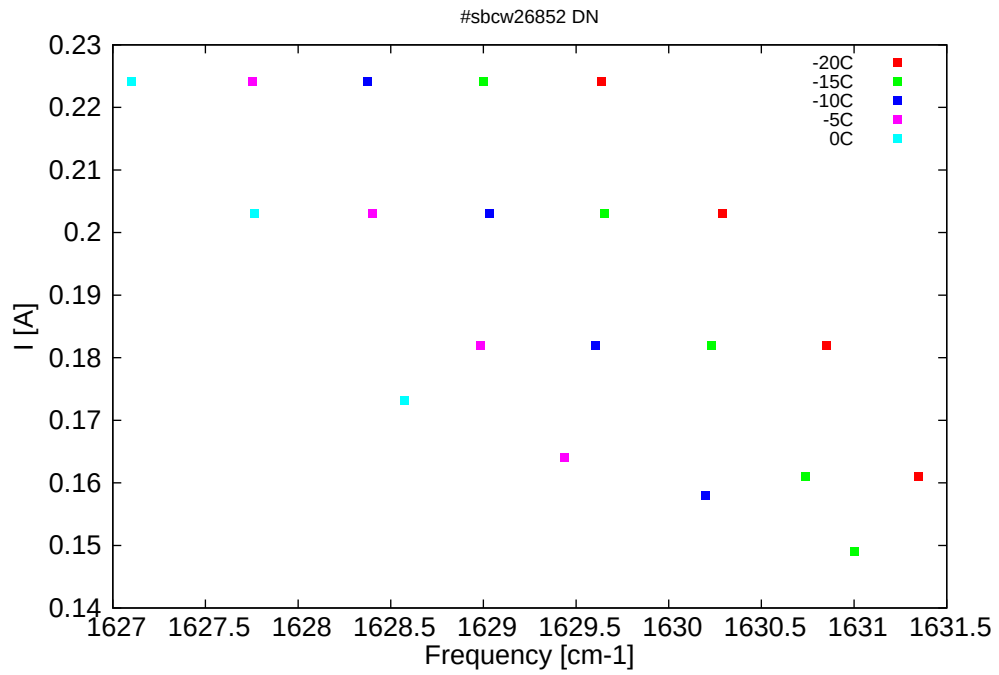


Figure 3: Applied DC current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{LASER} [V]	I[A]
6129.9	1631.3	12.8	-20	9.48	0.161
6131.8	1630.8	29.6	-20	9.71	0.182
6133.9	1630.3	42.5	-20	9.93	0.203
6136.3	1629.6	49.2	-20	10.16	0.224
6131.2	1631	0	-15	9.32	0.149
6132.2	1630.7	6.5	-15	9.45	0.161
6134.1	1630.2	23	-15	9.68	0.182
6136.3	1629.7	35	-15	9.9	0.203
6138.7	1629	42.4	-15	10.13	0.224
6134.2	1630.2	0.3	-10	9.39	0.158
6136.5	1629.6	16.3	-10	9.65	0.182
6138.6	1629	28.5	-10	9.88	0.203
6141.1	1628.4	36.7	-10	10.11	0.224
6137.1	1629.4	0.1	-5	9.43	0.164
6138.8	1629	10.5	-5	9.62	0.182
6141	1628.4	22.7	-5	9.85	0.203
6143.4	1627.8	30.5	-5	10.08	0.224
6140.3	1628.6	0.3	0	9.5	0.173
6143.4	1627.8	16.8	0	9.83	0.203
6145.9	1627.1	26	0	10.06	0.224

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

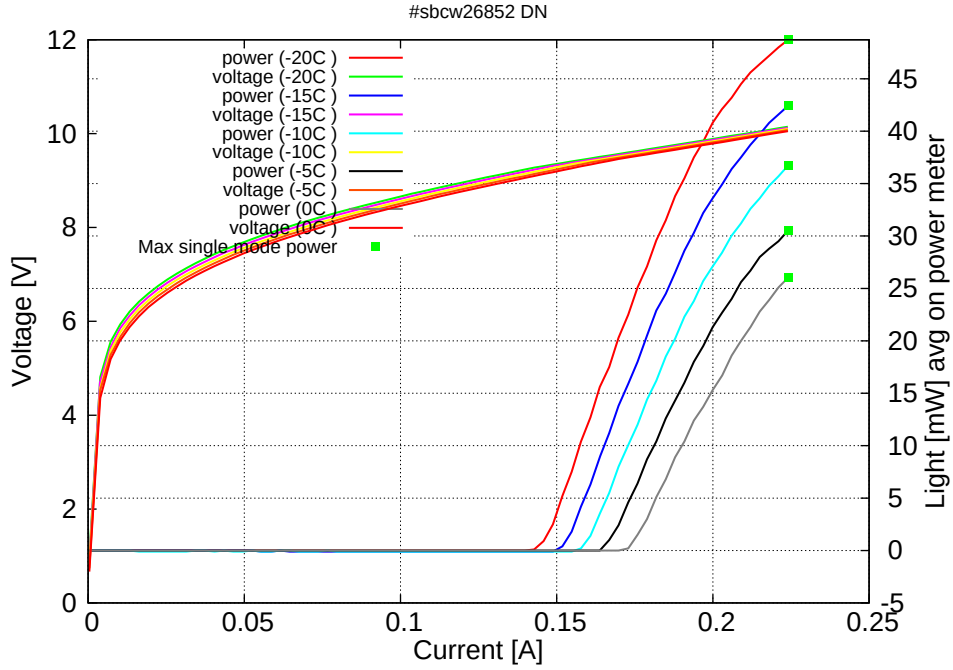


Figure 4: voltage and avg power vs current in continuous-wave operation (the solid squares indicate the maximum singlemode emitted power)

Note: at -20C: $I_{th}=0.14A$ / $V_{th}=9.3V$ (2-wires measurements). Maximum operation current: 0.225A for all temperatures.

Figure 3: spectra at different temperatures for various DC currents

