

Datasheet for #sb25896 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 longer pulses, higher repetition rate, higher voltage or higher current than specified in this document may cause damage. It will result in loss of warranty, unless agreed upon with Alpes Lasers!

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.

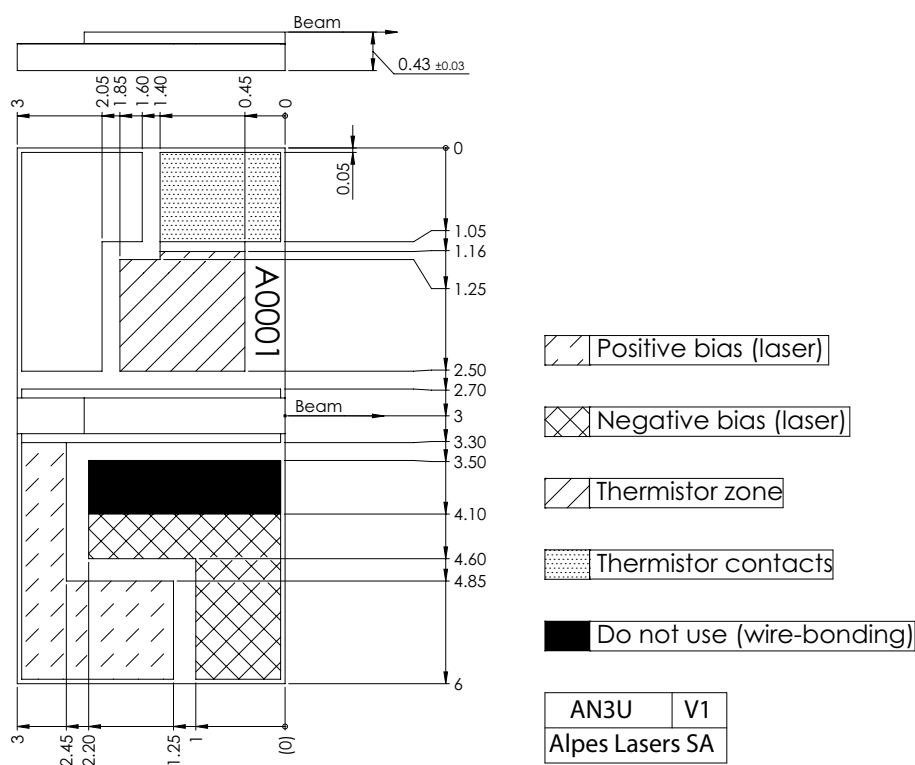


Figure 1: Mechanical and electrical interface for #sb25896 DN (please note that AlN submount numbering is A0WGW)

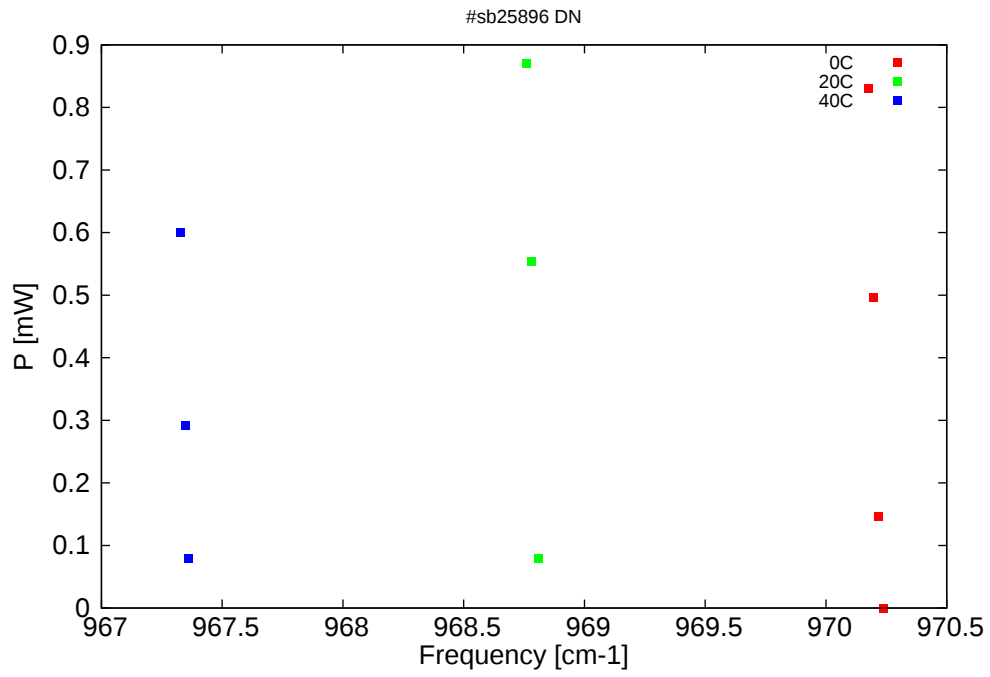


Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

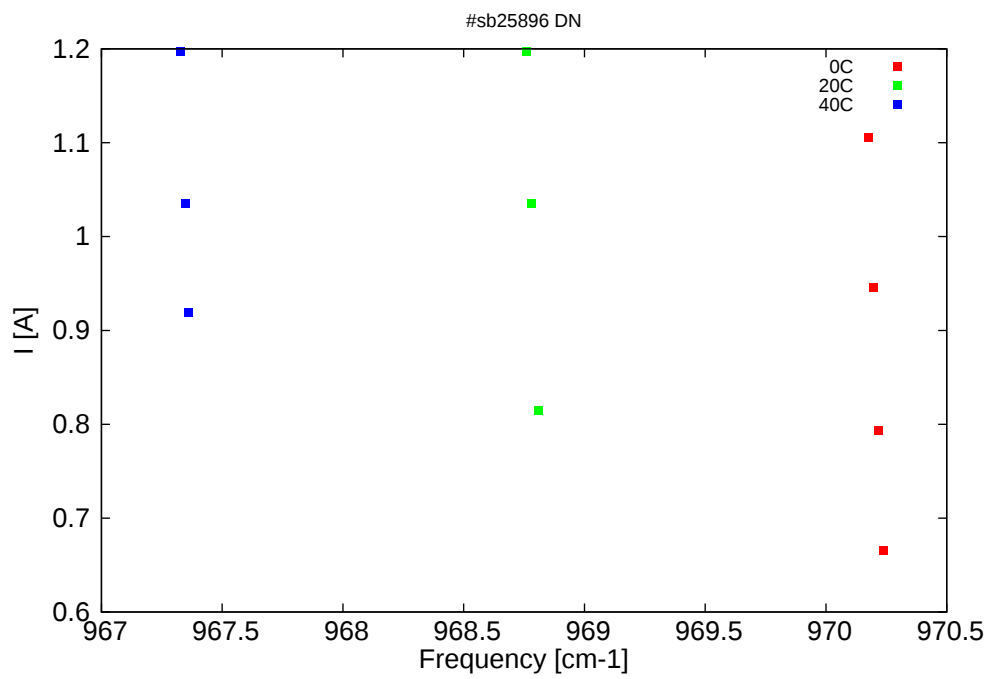


Figure 3: Peak current as a function of singlemode emission frequencies and temperatures

λ [nm]	ν [cm ⁻¹]	P[mW]	Temp[°C]	U_{pulse} [V]	I_{pulse} [A]
10306.7	970.2	0	0	9.22	0.665
10307	970.2	0.1	0	9.83	0.793
10307.2	970.2	0.5	0	10.45	0.946
10307.4	970.2	0.8	0	11.17	1.106
10321.9	968.8	0.1	20	9.41	0.815
10322.2	968.8	0.6	20	10.28	1.035
10322.5	968.8	0.9	20	10.99	1.197
10337.4	967.4	0.1	40	9.82	0.919
10337.5	967.3	0.3	40	10.3	1.035
10337.8	967.3	0.6	40	11	1.197

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

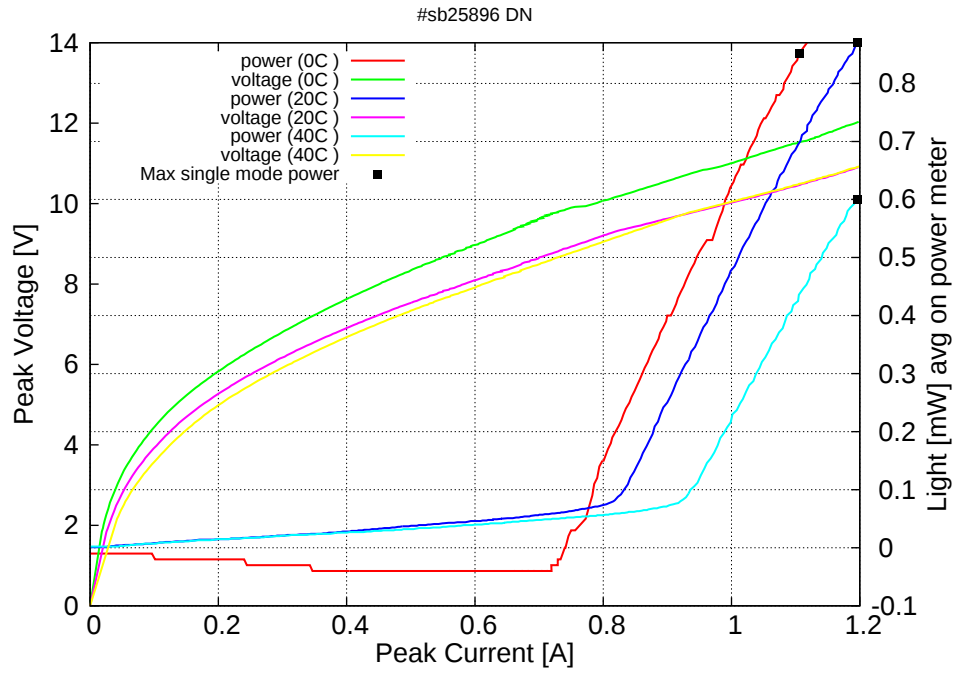


Figure 4: Peak voltage and average power vs peak current at 2% duty-cycle (500ns pulses on the laser) (the solid squares indicate the maximum singlemode emitted power)

Figure 3: spectra at different temperature for various peak currents (20ns pulses on the laser)

