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Datasheet for #sb25898 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.

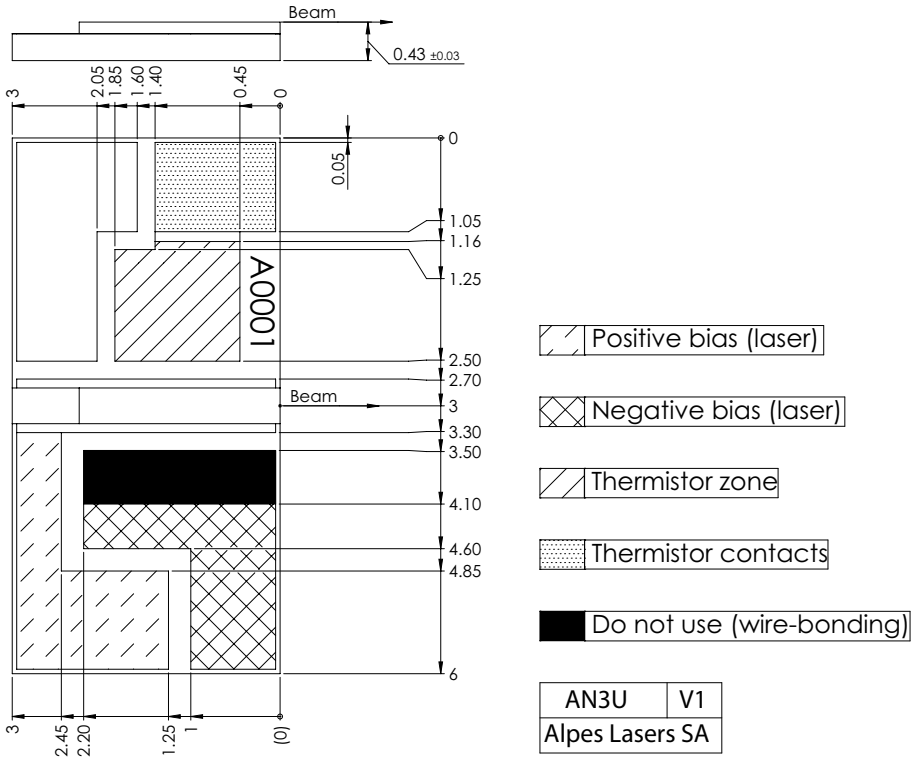

Figure 1: Mechanical and electrical interface for #sb25898 DN (please note that AlN submount numbering is A0V1V)

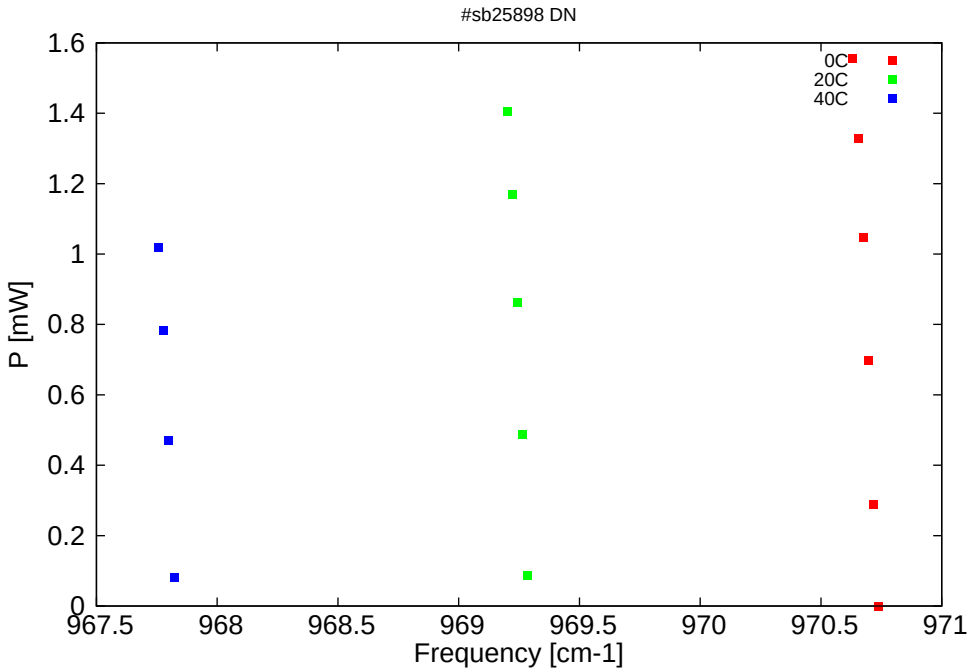

Figure 2: Output power as a function of the singlemode emission frequencies and temperatures

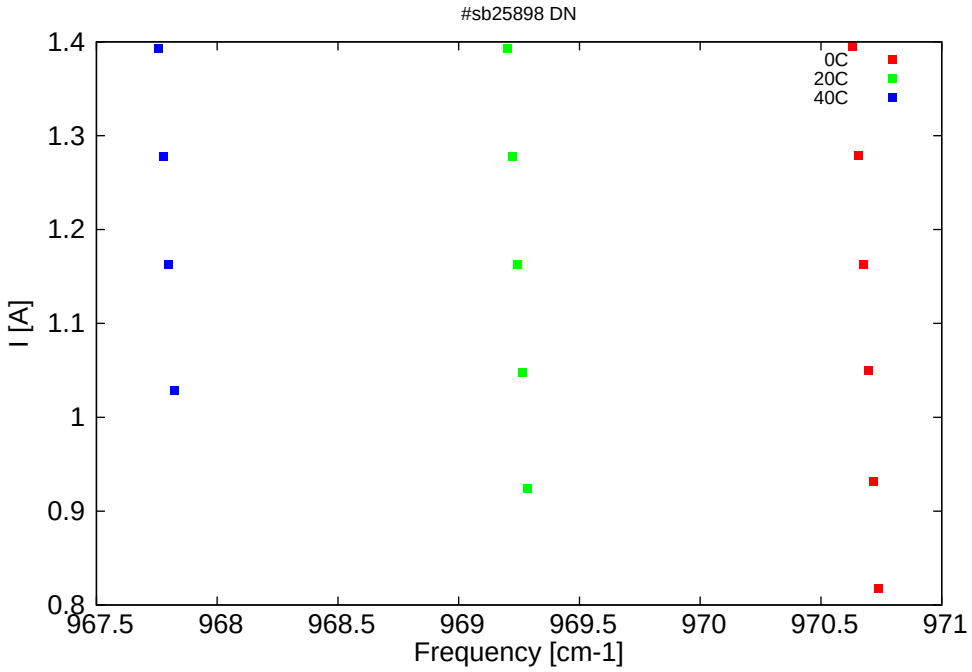

Figure 3: Peak current as a function of singlemode emission frequencies and temperatures

λ[nm]	ν[cm^{-1}]	P[mW]	Temp[°C]	U$_{pulse}$[V]	I$_{pulse}$[A]
10301.4	970.7	0	0	9.29	0.818
10301.6	970.7	0.3	0	9.73	0.932
10301.9	970.7	0.7	0	10.2	1.05
10302.1	970.7	1	0	10.68	1.163
10302.3	970.7	1.3	0	11.2	1.279
10302.6	970.6	1.6	0	11.8	1.395
10316.9	969.3	0.1	20	9.66	0.924
10317.1	969.3	0.5	20	10.17	1.047
10317.3	969.2	0.9	20	10.67	1.162
10317.5	969.2	1.2	20	11.2	1.278
10317.8	969.2	1.4	20	11.79	1.393
10332.5	967.8	0.1	40	10.06	1.029
10332.7	967.8	0.5	40	10.67	1.162
10332.9	967.8	0.8	40	11.2	1.278
10333.2	967.8	1	40	11.8	1.393

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

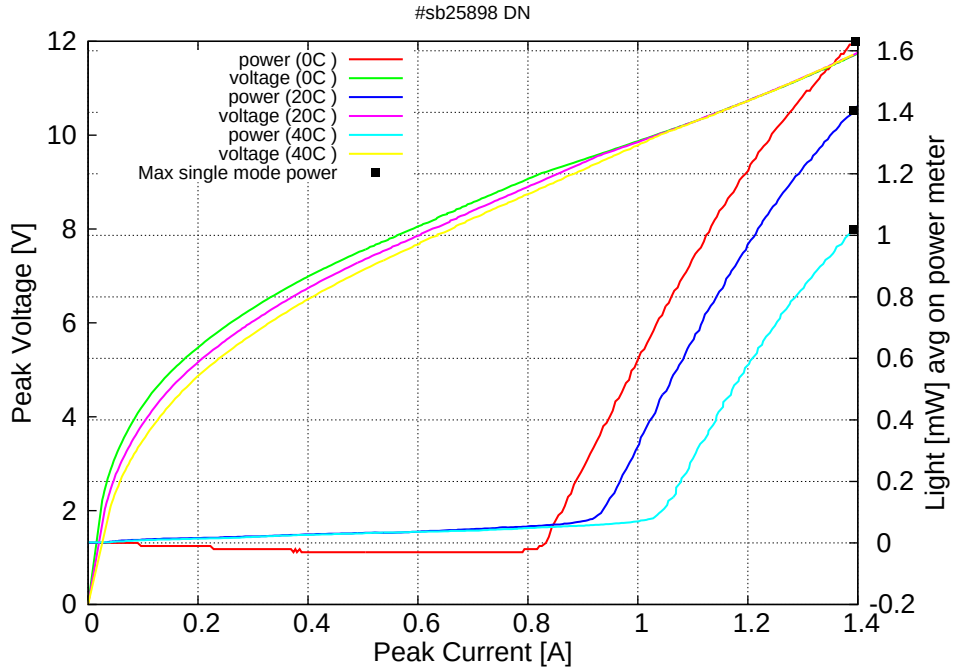

Figure 4: Peak voltage and average power vs peak current at 2% duty-cycle (500ns pulses on the laser) (the solid squares indicate the maximum singlemode emitted power)

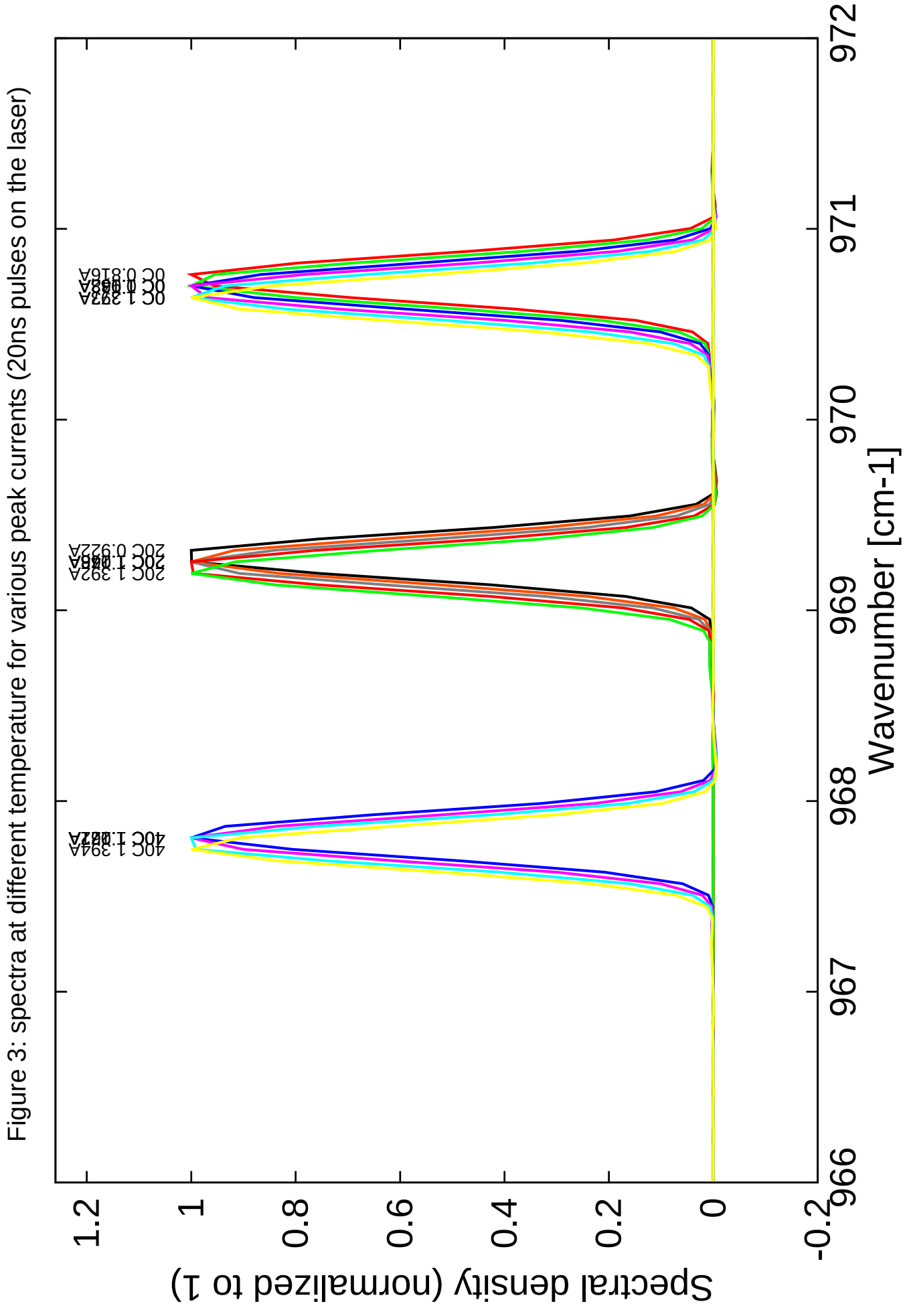

Figure 3: spectra at different temperature for various peak currents (20ns pulses on the laser)