

Supplementary Material

An Efficiency Improvement Driver for Master Oscillator Power Amplifier Pulsed Laser Systems

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Table S1. Efficiency of the Power LD driver.

Frequency	Input Current	Input Voltage	Drive Voltage	Drive Current	Input Power	Drive Power	Efficiency
(kHz)	(A)	(V)	(V)	(A)	(W)	(W)	(%)
20	0.39	14.986	8.69	0.485	5.84454	4.21465	72.1126
20	0.73	14.958	9.12	1.107	10.91934	10.09584	92.45834
20	1.38	14.915	9.54	2.05	20.5827	19.557	95.01669
20	2.1	14.867	9.9	3.04	31.2207	30.096	96.39758
20	2.89	14.816	10.26	4.026	42.81824	41.30676	96.47001
20	3.73	14.762	10.59	5.024	55.06226	53.20416	96.62546
20	4.61	14.705	10.91	5.996	67.79005	65.41636	96.49847
20	5.63	14.637	11.28	7.043	82.40631	79.44504	96.4065
20	6.69	14.566	11.62	8.105	97.44654	94.1801	96.64797
20	7.38	14.52	11.74	8.788	107.1576	103.1711	96.2798
40	0.29	14.988	8.57	0.407	4.34652	3.48799	80.24788
40	0.7	14.961	9.03	1.059	10.4727	9.56277	91.31141
40	1.37	14.917	9.48	2.049	20.43629	19.42452	95.04915
40	2.1	14.869	9.86	3.036	31.2249	29.93496	95.86887
40	2.89	14.818	10.21	4.038	42.82402	41.22798	96.27303
40	3.71	14.763	10.53	5.019	54.77073	52.85007	96.49327
40	4.6	14.704	10.85	6.008	67.6384	65.1868	96.37543
40	5.58	14.639	11.19	7.021	81.68562	78.56499	96.17971
40	6.69	14.559	11.59	8.07	97.39971	93.5313	96.02831
40	7.35	14.516	11.8	8.676	106.6926	102.3768	95.95492
100	0.31	14.983	8.67	0.415	4.64473	3.59805	77.46521
100	0.7	14.958	9.09	1.038	10.4706	9.43542	90.11346
100	1.4	14.912	9.55	2.064	20.8768	19.7112	94.41677
100	2.12	14.866	9.91	3.026	31.51592	29.98766	95.15083
100	2.91	14.812	10.25	4.021	43.10292	41.21525	95.62055
100	3.81	14.754	10.6	5.083	56.21274	53.8798	95.8498

100	4.67	14.698	10.9	6.032	68.63966	65.7488	95.78835
100	5.64	14.635	11.24	7.023	82.5414	78.93852	95.63506
100	6.72	14.563	11.6	8.057	97.86336	93.4612	95.50173
100	7.23	14.529	11.74	8.538	105.0447	100.2361	95.42238
200	0.38	14.982	8.71	0.504	5.69316	4.38984	77.10727
200	0.7	14.96	9.04	1.007	10.472	9.10328	86.92972
200	1.39	14.915	9.5	2.021	20.73185	19.1995	92.60872
200	2.12	14.867	9.87	3.006	31.51804	29.66922	94.13409
200	2.92	14.815	10.22	4.012	43.2598	41.00264	94.78232
200	3.78	14.759	10.55	5.016	55.78902	52.9188	94.85522
200	4.67	14.699	10.87	6	68.64433	65.22	95.01149
200	5.68	14.633	11.22	7.021	83.11544	78.77562	94.77856
200	6.73	14.563	11.53	8.068	98.00899	93.02404	94.91378
200	6.87	14.552	11.55	8.21	99.97224	94.8255	94.85183