

MAX 1771 V4 Performance Tests

<i>Experiment</i>	<i>Vin V</i>	<i>Iin A</i>	<i>Pin W</i>	<i>Vout</i>	<i>Rload ohms</i>	<i>Iout mA</i>	<i>Pout W</i>	<i>%eff.</i>
1	12	0.33	3.96	181.75	9698	18.74	3.41	86.01
2	12	0.68	8.16	181.95	4685	38.84	7.07	86.60
3	12	0.92	11.04	175.52	3262	53.81	9.44	85.55
4	15	0.26	3.90	182.00	9698	18.77	3.42	87.58
5	15	0.54	8.03	182.10	4685	38.87	7.08	88.20
6	15	0.77	11.55	181.80	3262	55.73	10.13	87.72
7 (*)	15	0.78	11.70	180.65	3262	55.38	10.00	85.51

* Experiment 7 used a shielded CDRH127-101 inductor rather than the default unshielded one. Note the efficiency drop vs. exp. 6

Output ripple was typically between 1% and 1.4%

Switcher rate was approximately 62kHz

If the default inductor (Epcos B82479-A1-104M) is replaced with a Sumida CDRH127-101 shielded inductor, then the overall efficiency drops by about 2% to 3%, but the level of radiated noise decreases. If RFI is a problem for you, this may be worth trying.

Nick de Smith (nick@desmith.net) 12th March, 2004