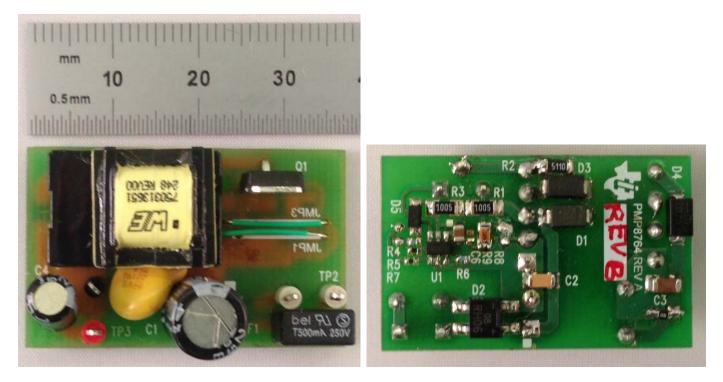


1 Photos

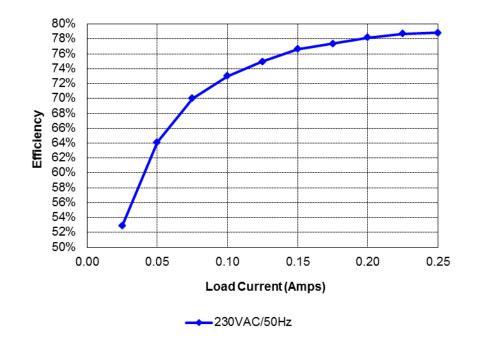
The photographs below show the PMP8764 Rev A prototype assembly. This circuit was built on a PMP8764 Rev A PCB.



2 Standby Power

With no load attached to the output of the supply, the unit draws 30mW of input power with a 230VAC/50Hz input.

3 Efficiency



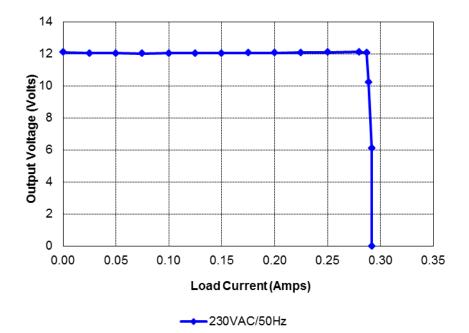
02/27/2013 PMP8764 Rev A Test Results



lout	Vout	Vin	lin	Pin	PF	Pout	Losses	Efficiency
0.000	12.11	230.0	0.0009	0.030		0.00	0.03	0.0%
0.025	12.05	230.0	0.007	0.57	0.34	0.30	0.27	52.9%
0.050	12.05	230.0	0.011	0.94	0.36	0.60	0.34	64.1%
0.075	12.04	230.0	0.015	1.29	0.38	0.90	0.39	70.0%
0.100	12.05	230.0	0.018	1.65	0.40	1.21	0.45	73.0%
0.125	12.05	230.0	0.021	2.01	0.42	1.51	0.50	74.9%
0.150	12.06	230.0	0.024	2.36	0.43	1.81	0.55	76.7%
0.175	12.07	230.0	0.027	2.73	0.44	2.11	0.62	77.4%
0.200	12.08	230.0	0.030	3.09	0.45	2.42	0.67	78.2%
0.225	12.10	230.0	0.033	3.46	0.46	2.72	0.74	78.7%
0.250	12.11	230.0	0.035	3.84	0.47	3.03	0.81	78.8%

4 Current Limit

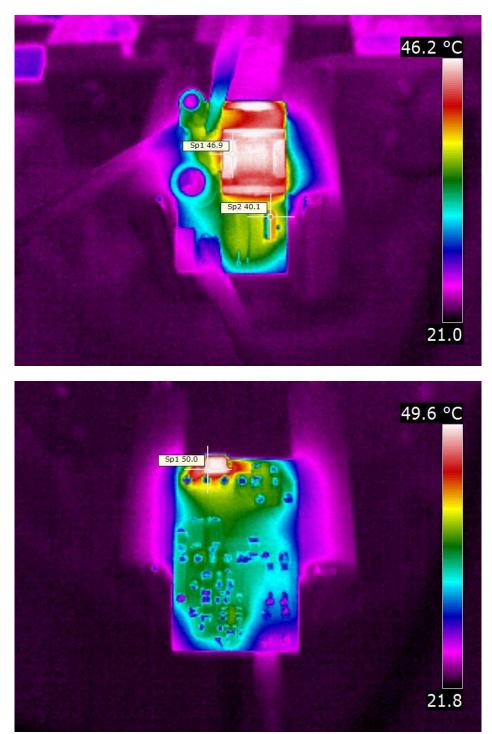
A plot of the output voltage versus load current is shown below.





5 Thermal Images

The ambient temperature was 25°C. The output was loaded with 250mA.

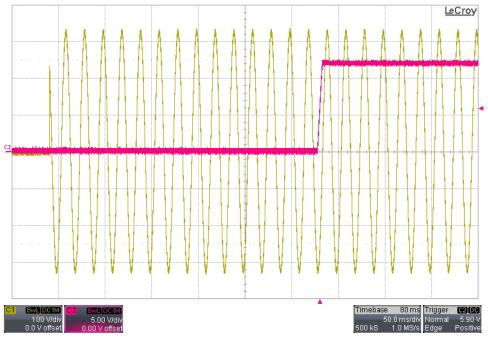




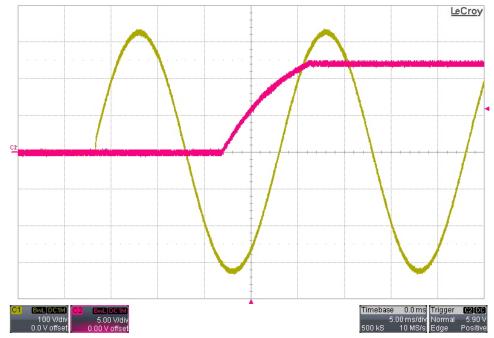
6 Startup

Channel 1 shows the AC input voltage. Channel 2 shows the output voltage.

6.1 230VAC/50Hz Startup – 0A Load



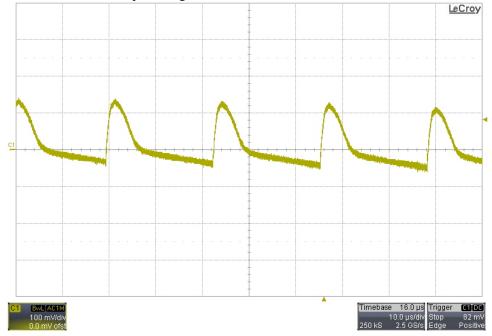
6.2 230VAC/50Hz Startup – 48Ω Load





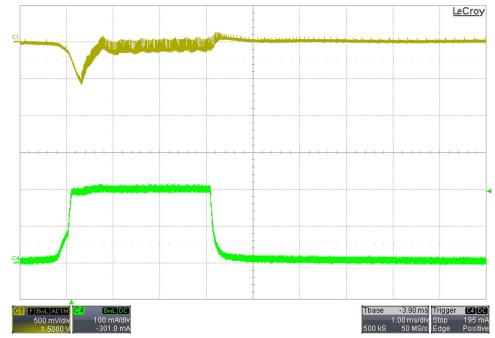
7 Output Ripple Voltage

The output was loaded with 250mA. The input voltage was 230VAC/50Hz.



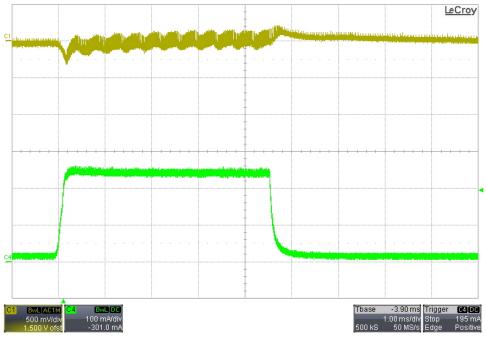
8 Load Transients

8.1 0A to 0.2A Transient – 230VAC/50Hz Input





8.2 10mA to 0.2A Transient – 230VAC/50Hz Input

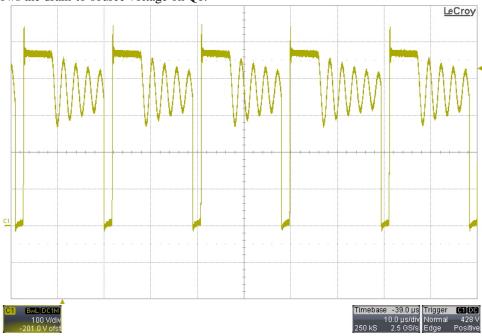


9 Switching Waveforms

The images below show the voltage waveforms on the switching devices within the supply. The input was 265VAC/50Hz. The output was loaded 0.25A.

9.1 Primary Waveforms

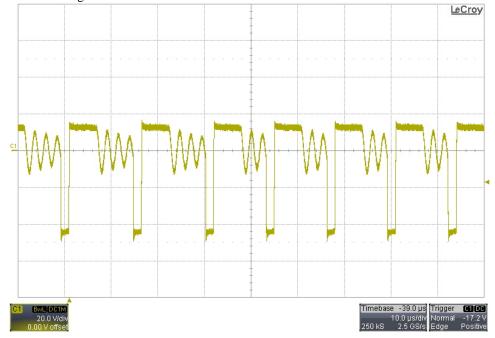
The image below shows the drain-to-source voltage on Q1.





9.2 Secondary Waveforms

The image below shows the voltage on the anode of D4.



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