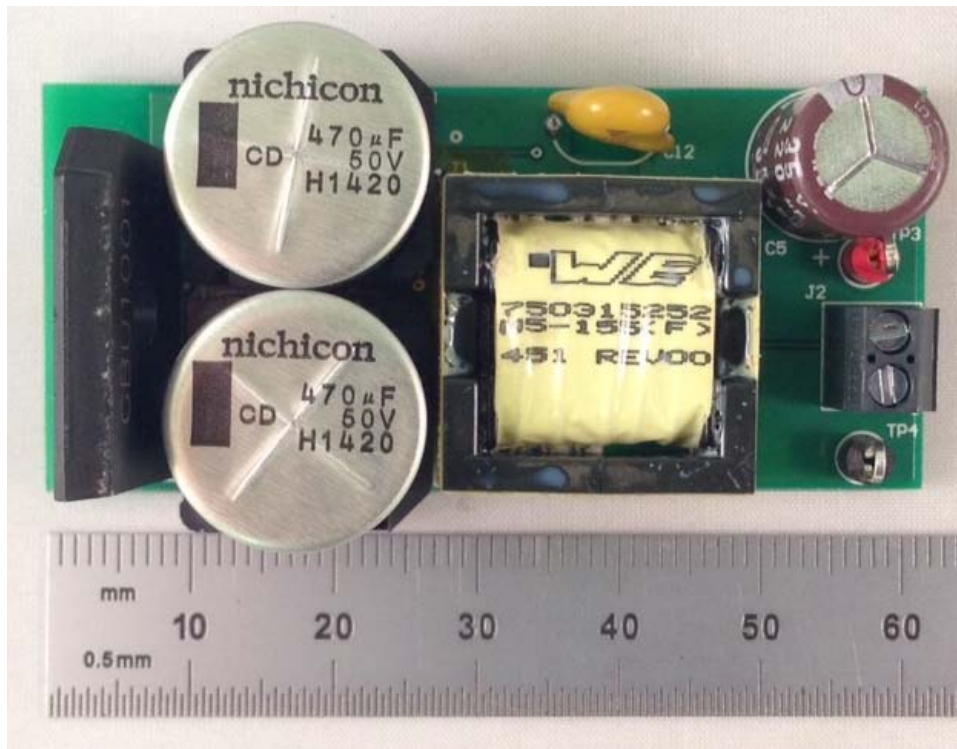


## 1 Photos

The photographs below show the PMP10856 Rev B assembly:

### Top Side

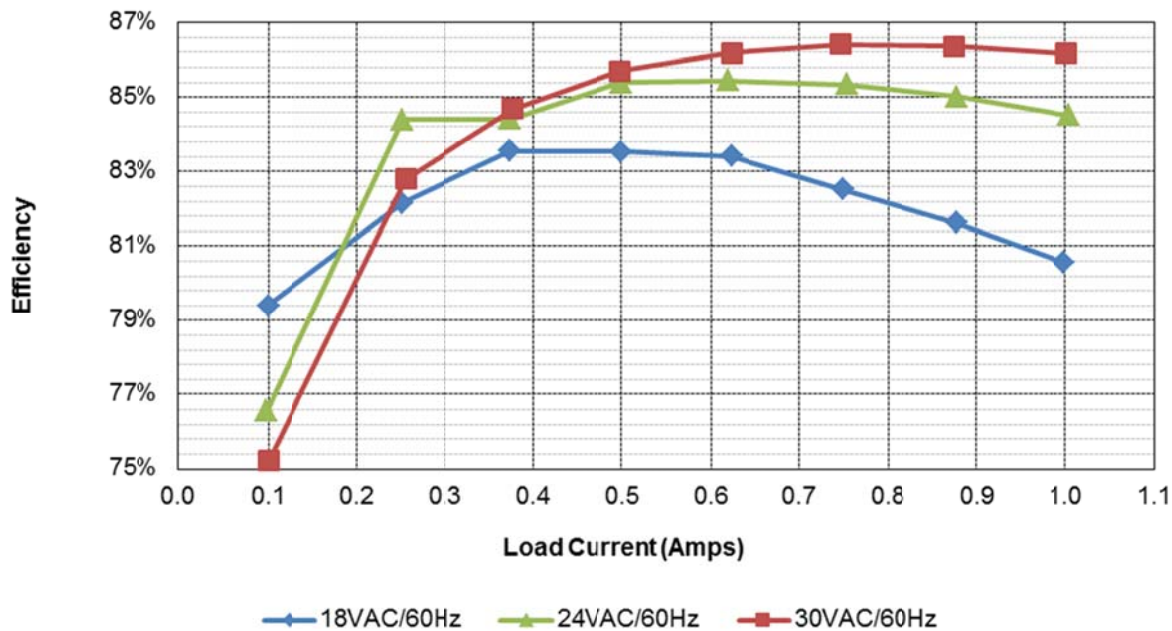


### Bottom Side



## 2 Efficiency

The efficiency data is shown in the graph, and tables, below:



18VAC/60Hz							
I <sub>out</sub>	V <sub>out</sub>	V <sub>in</sub>	I <sub>in</sub>	P <sub>in</sub>	P <sub>out</sub>	Losses	Efficiency
0.000	24.06	18.03	0.045	0.34	0.00	0.34	0.0%
0.100	24.06	17.97	0.324	3.03	2.41	0.62	79.4%
0.251	24.06	17.97	0.713	7.35	6.04	1.31	82.2%
0.373	24.06	17.99	1.000	10.74	8.97	1.77	83.6%
0.500	24.06	18.00	1.301	14.40	12.03	2.37	83.5%
0.623	24.06	18.02	1.587	17.97	14.99	2.98	83.4%
0.749	24.06	18.04	1.896	21.84	18.02	3.82	82.5%
0.877	24.06	18.04	2.211	25.85	21.10	4.75	81.6%
0.999	24.06	18.05	2.522	29.84	24.04	5.80	80.5%

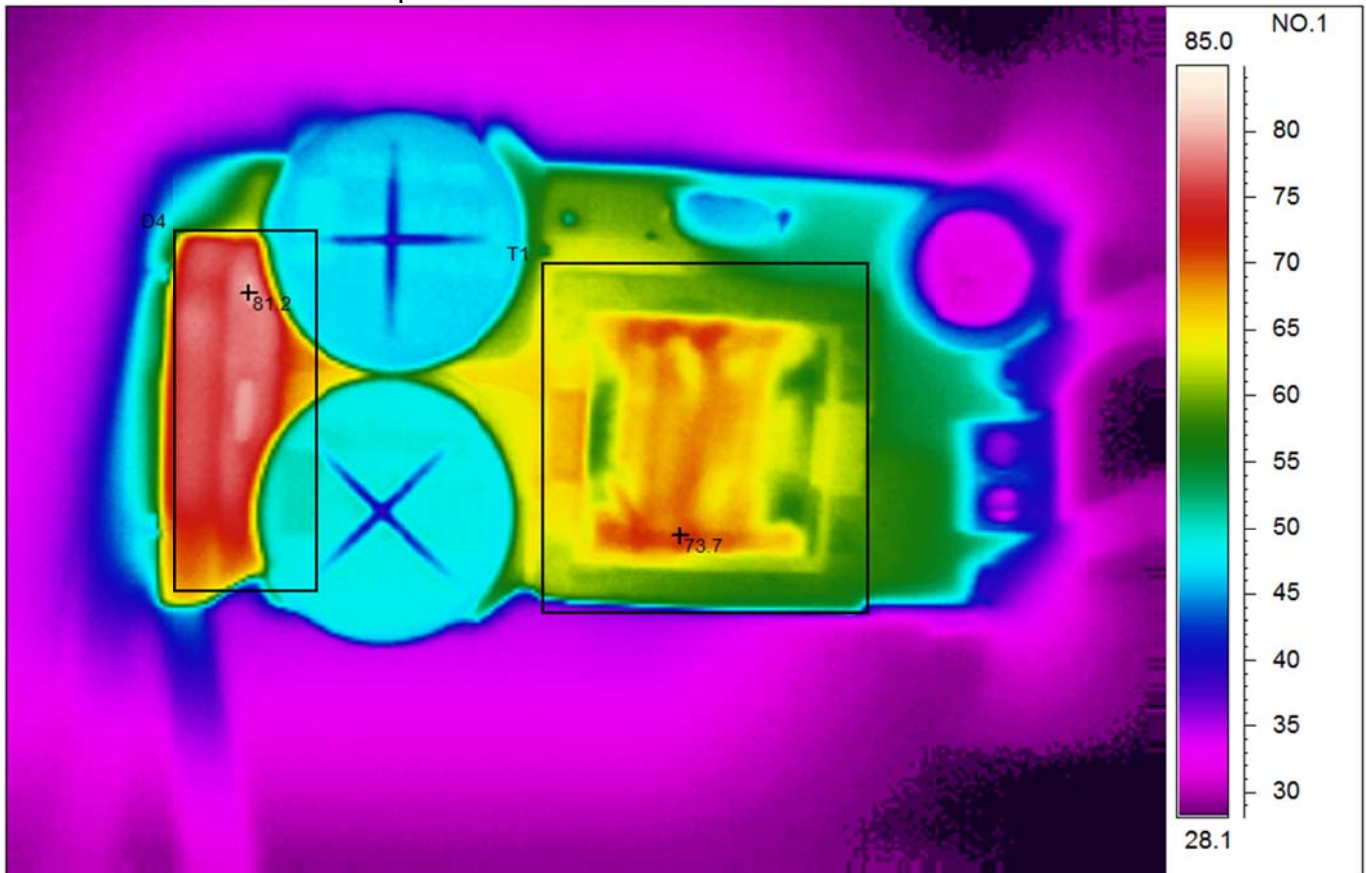
  

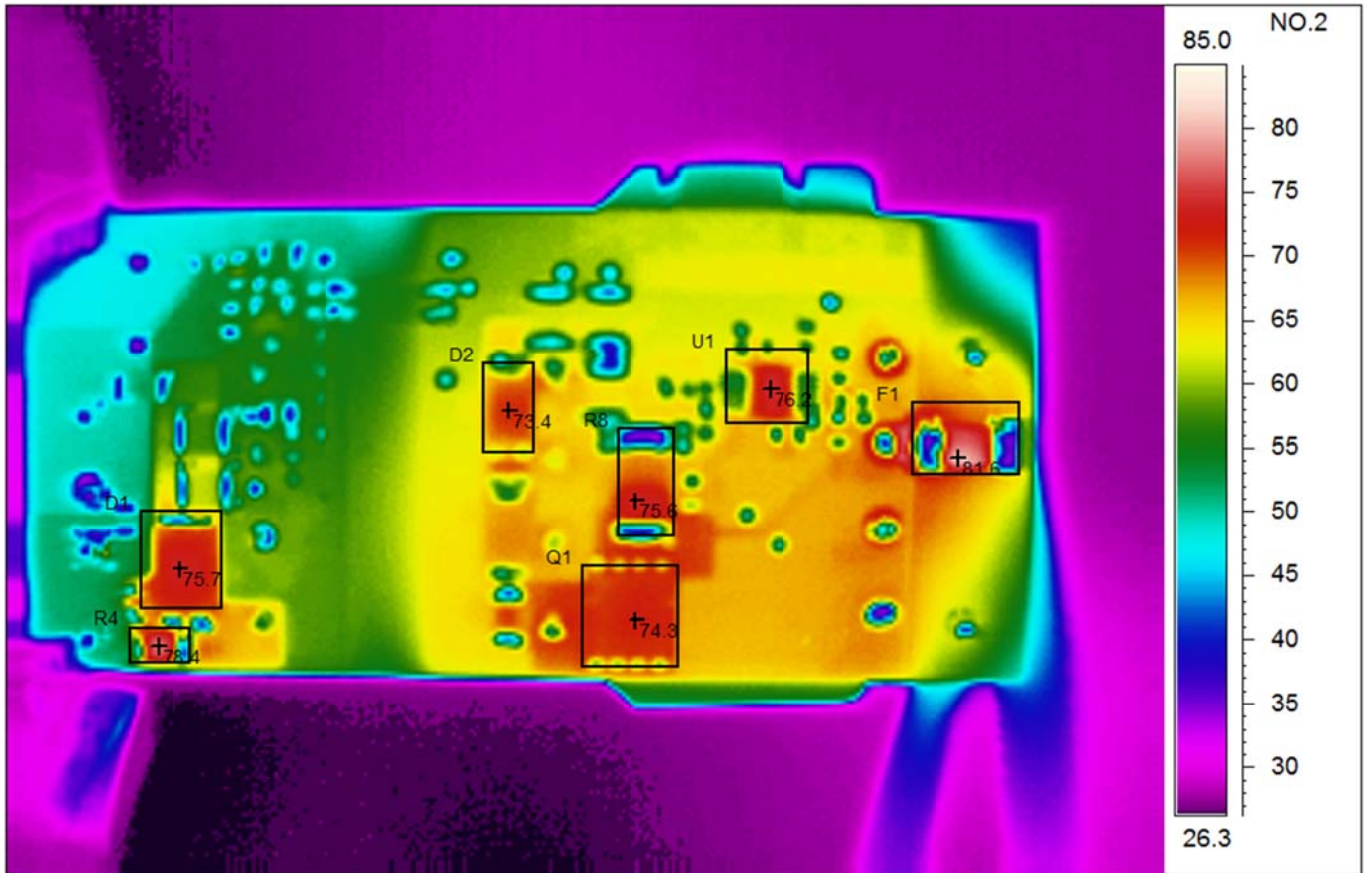
24VAC/60Hz							
I <sub>out</sub>	V <sub>out</sub>	V <sub>in</sub>	I <sub>in</sub>	P <sub>in</sub>	P <sub>out</sub>	Losses	Efficiency
0.000	24.06	24.04	0.045	0.43	0.00	0.43	0.0%
0.098	24.06	24.00	0.264	3.08	2.36	0.72	76.6%
0.251	24.06	24.03	0.558	7.16	6.04	1.12	84.4%
0.374	24.06	24.07	0.794	10.66	9.00	1.66	84.4%
0.499	24.06	24.01	1.018	14.06	12.01	2.05	85.4%
0.619	24.06	24.04	1.232	17.43	14.89	2.54	85.4%
0.753	24.06	23.98	1.471	21.23	18.12	3.11	85.3%
0.878	24.06	24.01	1.691	24.85	21.12	3.73	85.0%
1.004	24.06	24.05	1.914	28.58	24.16	4.42	84.5%

30VAC/60Hz							
Iout	Vout	Vin	Iin	Pin	Pout	Losses	Efficiency
0.000	24.06	30.06	0.046	0.52	0.00	0.52	0.0%
0.101	24.06	30.03	0.234	3.23	2.43	0.80	75.2%
0.255	24.06	30.06	0.487	7.41	6.14	1.27	82.8%
0.377	24.06	30.01	0.675	10.71	9.07	1.64	84.7%
0.498	24.06	30.07	0.855	13.98	11.98	2.00	85.7%
0.624	24.06	30.02	1.039	17.42	15.01	2.41	86.2%
0.746	24.06	29.97	1.215	20.77	17.95	2.82	86.4%
0.875	24.06	30.02	1.399	24.38	21.05	3.33	86.4%
1.002	24.06	29.97	1.583	27.98	24.11	3.87	86.2%

### 3 Thermal

The thermal images below show the circuit board with a 1A load. The ambient temperature was 25C with no air flow. The input was 24VAC/60Hz.





Area analysis	Value
D4Max	81.2°C
T1 Max	73.7°C

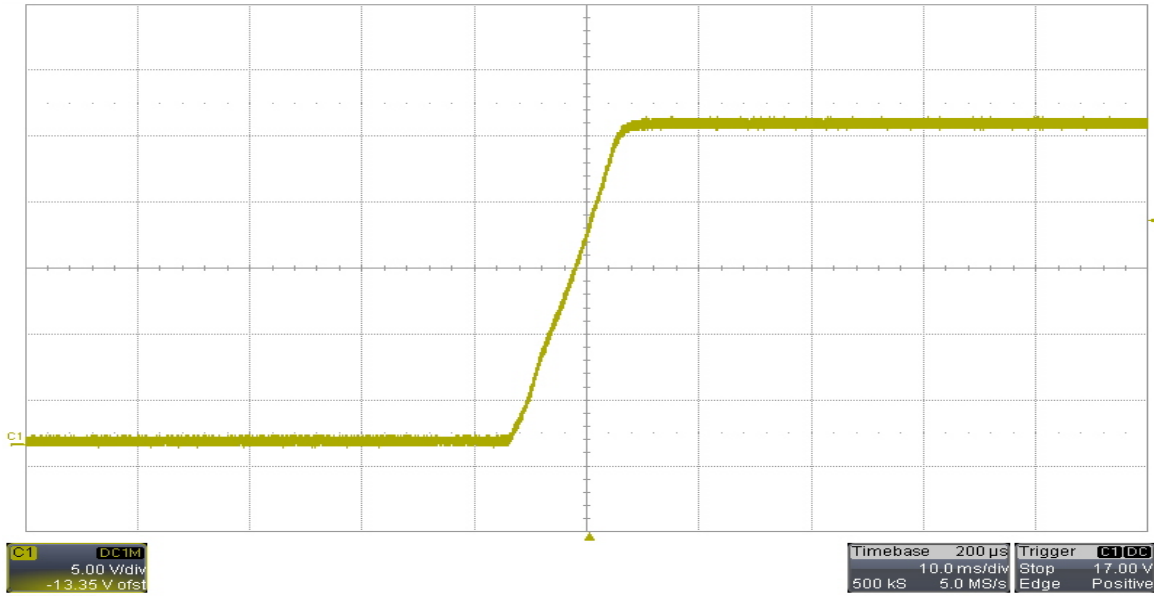
NO.1

Area analysis	Value
D1Max	75.7°C
R4Max	78.4°C
D2Max	73.4°C
Q1Max	74.3°C
R8Max	75.6°C
U1Max	76.2°C
F1 Max	81.6°C

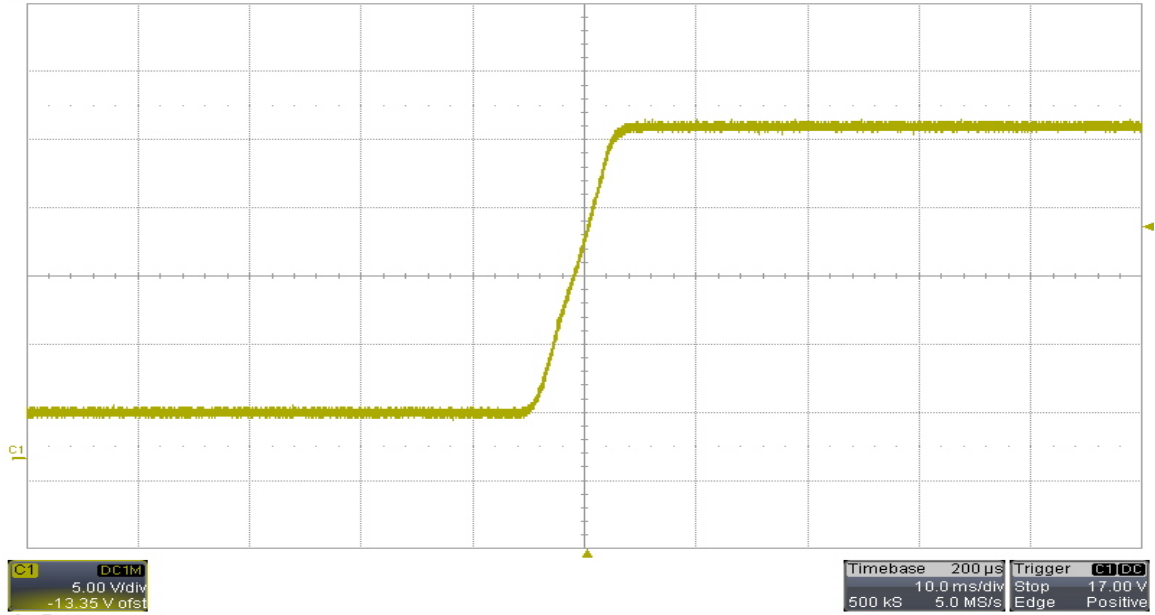
NO.2

## 4 Startup

### 4.1 24VAC/60Hz Input, No Load

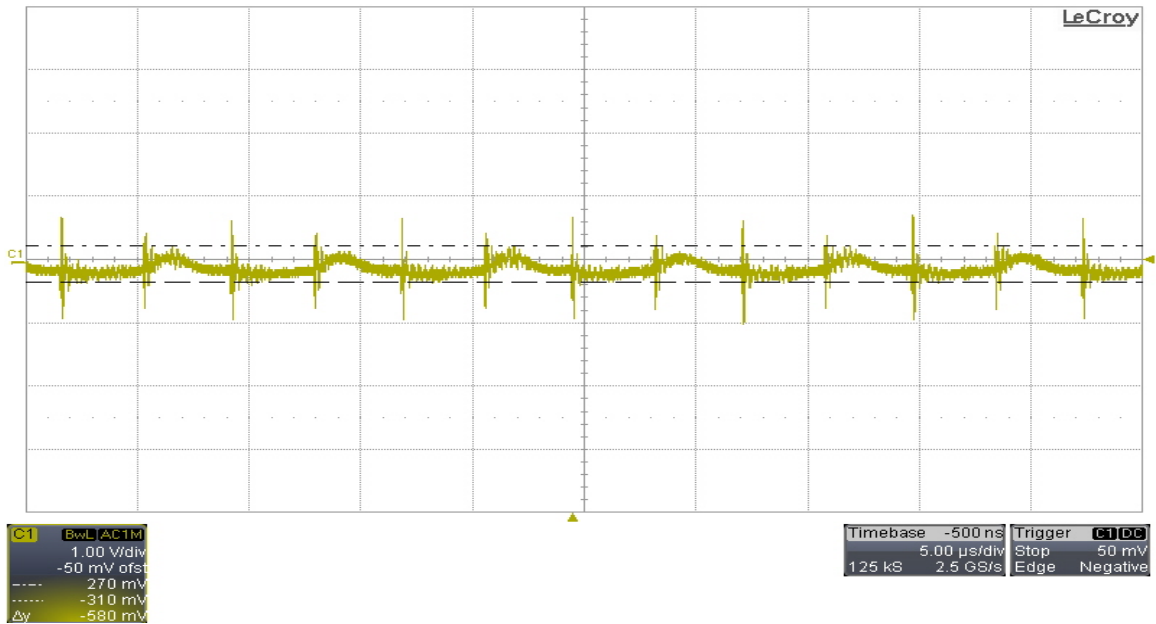


### 4.2 24VAC/60Hz Input, 24 $\Omega$ Load

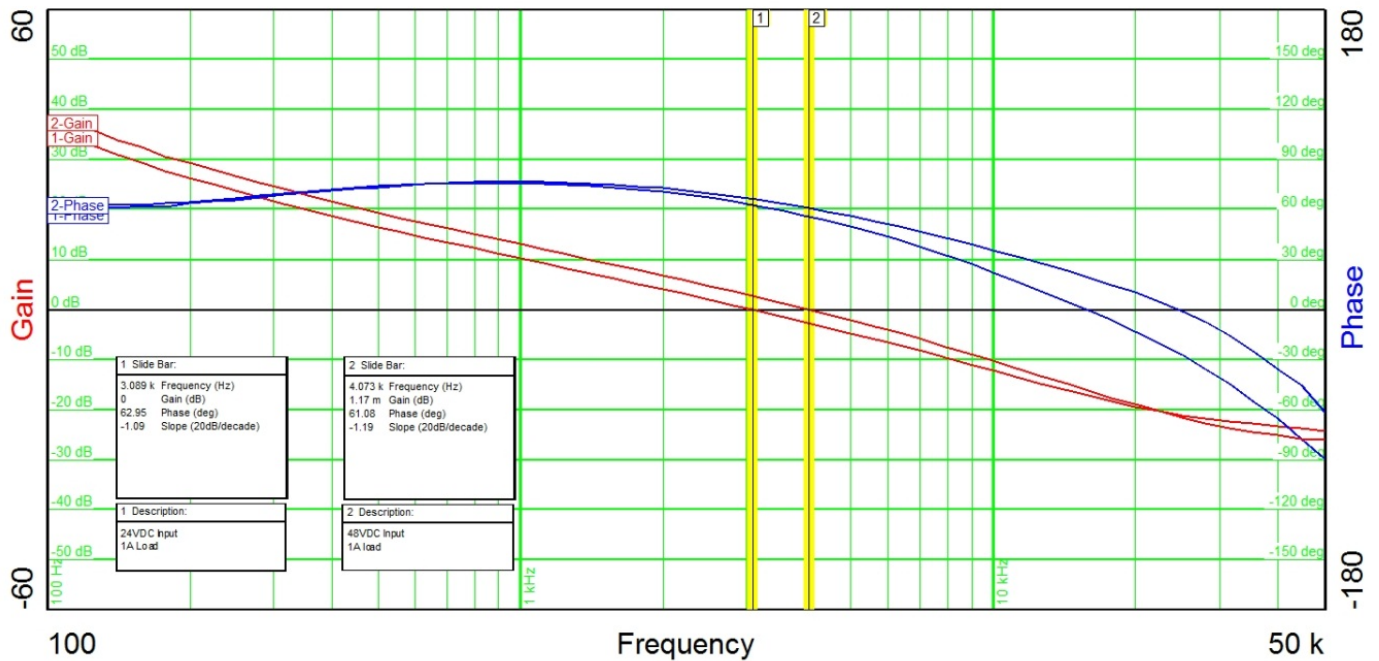


## 5 Output Ripple Voltage

### 5.1 24VAC/60Hz Input, 1A Load



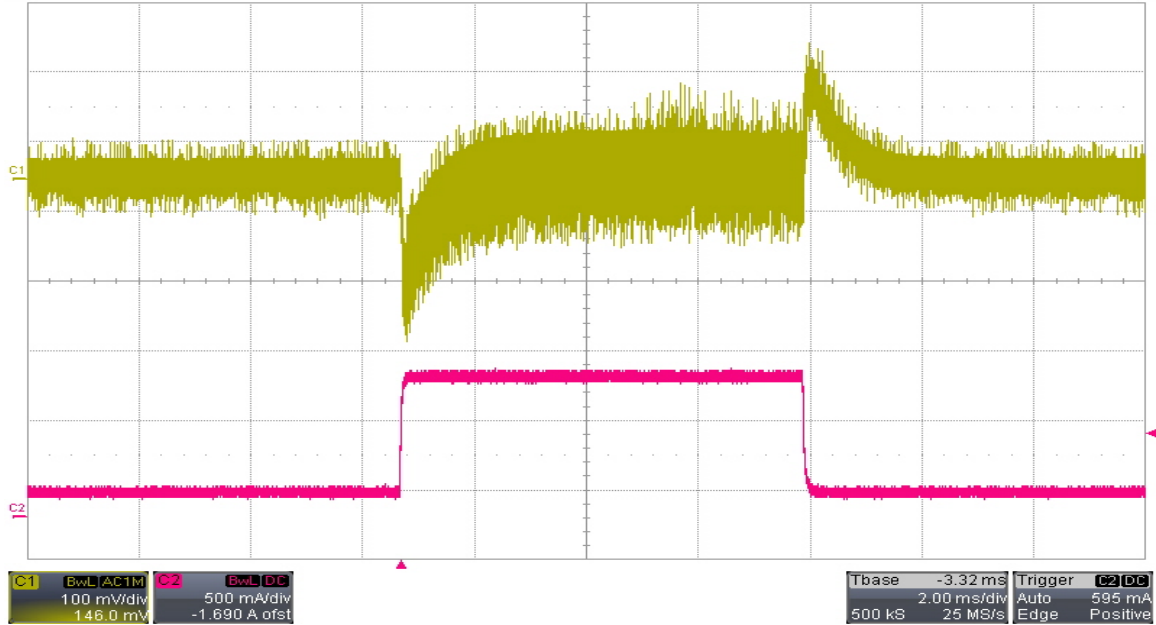
## 6 Frequency Response



## 7 Load Transients

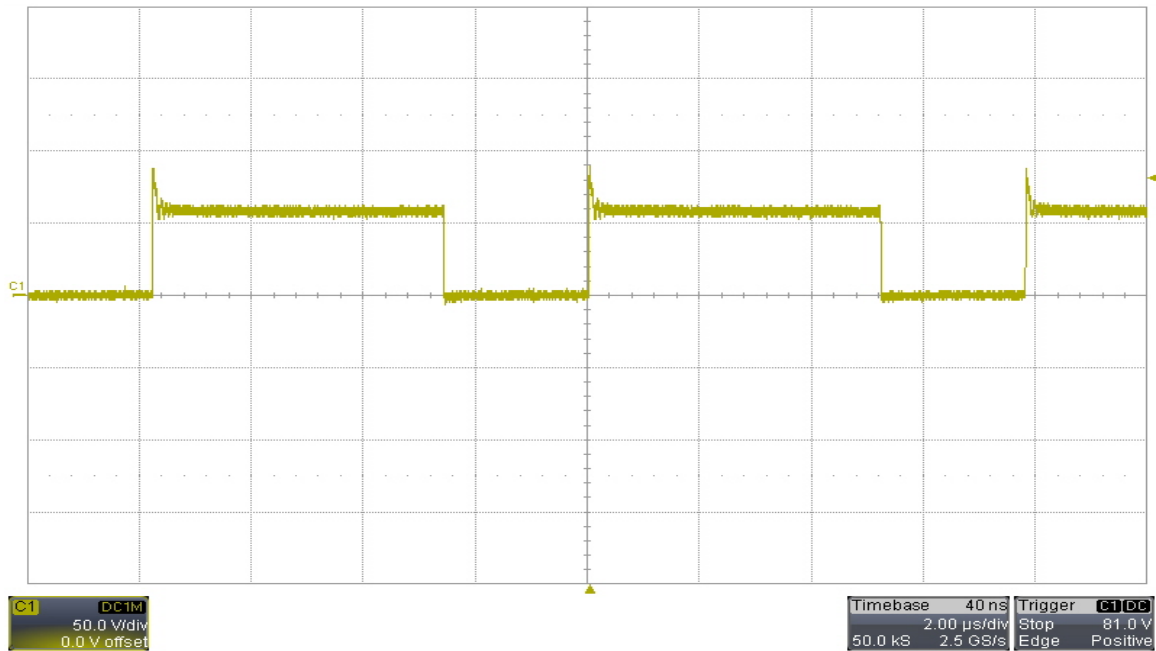
### 7.1 24VAC/60Hz Input

The below load transient current and output voltage is pulsed from 0A – 1A.

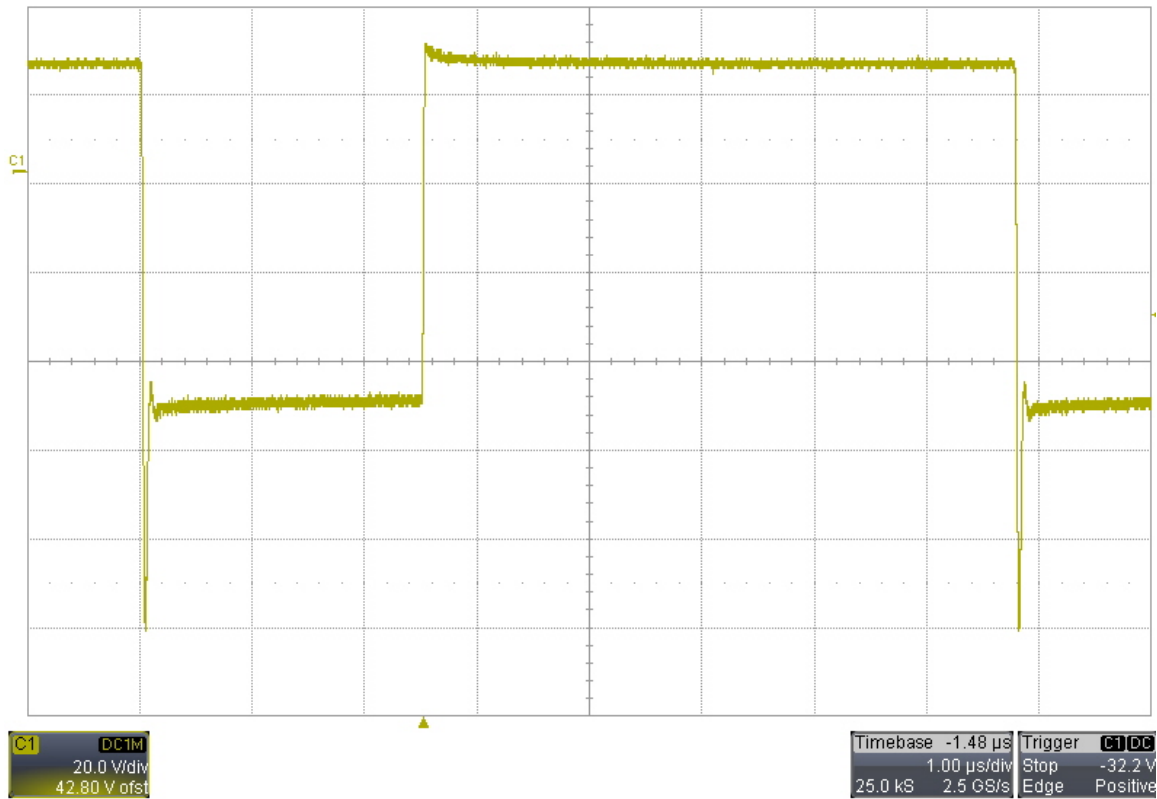


## 8 Switching Waveforms

### 8.1 Primary FET Vds (Q1) – 30VAC/60Hz Input, 1A Load



## 8.2 Output Diode Anode Voltage (D1) – 30VAC/60Hz Input, 1A Load





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