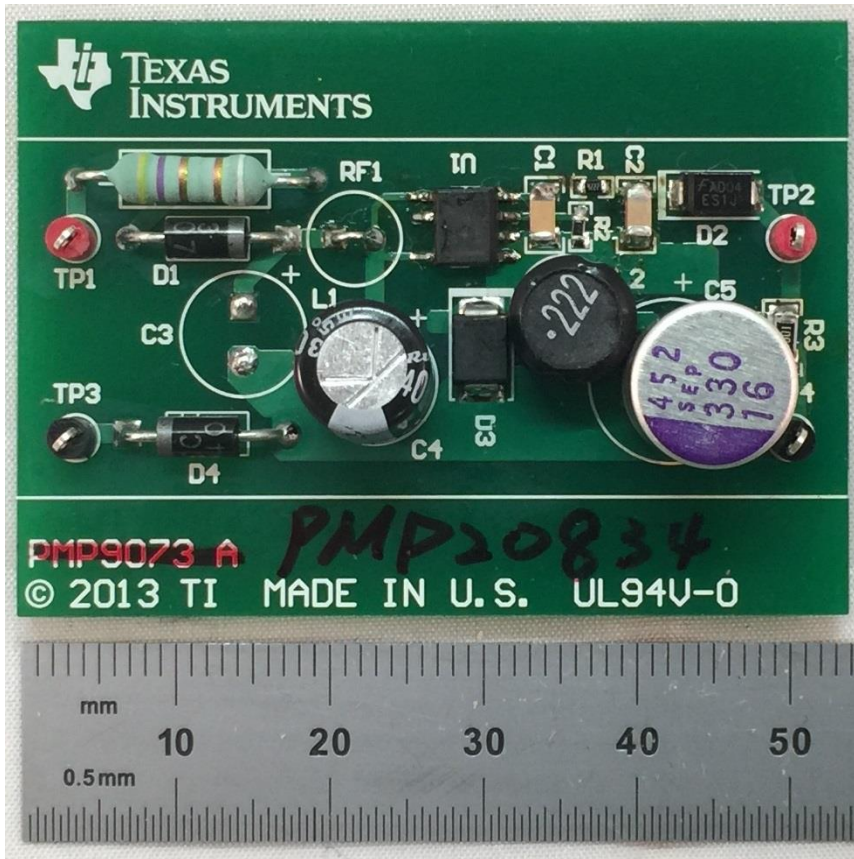


## 1 Photo

The photographs below show the PMP20834 Rev A assembly. This circuit was built on a PMP9073 Rev A PCB.



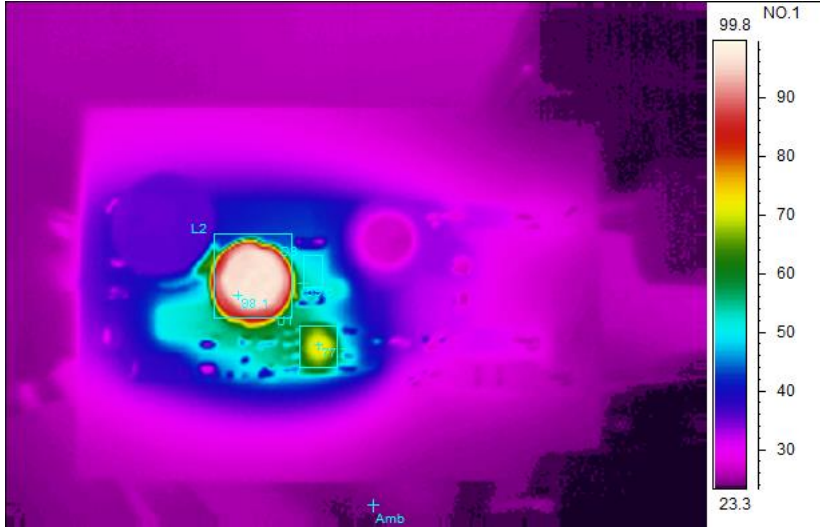
## 2 Output voltage regulation

120VAC/60Hz input		230VAC/50Hz input	
Vout(V)	Iout(A)	Vout(V)	Iout(A)
4.51	0.2009	4.49	0.2007
4.72	0.15	4.69	0.1508
4.94	0.1001	4.92	0.1009
4.99	0.079	4.97	0.0809
5.02	0.0601	5.01	0.0599
5.06	0.0402	5.05	0.04
5.12	0.02017	5.11	0.02015
5.41	0	5.4	0

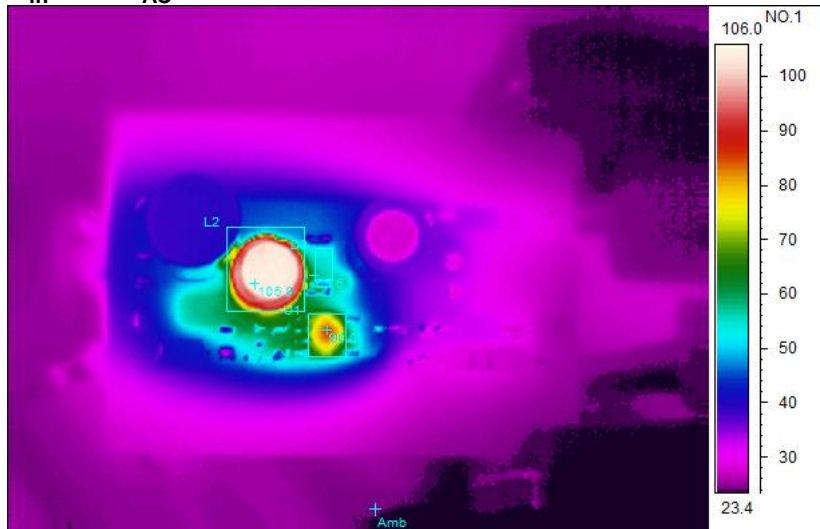
### 3 Thermal Images

The thermal images below show a top view and bottom view of the board under 120V<sub>AC</sub>/60Hz and 230V<sub>AC</sub>/50Hz input conditions. The ambient temperature was 20°C with no forced air flow. The output was at full load: 5V/0.2A.

**V<sub>in</sub>=120V<sub>AC</sub>/60Hz**



Spot analysis	Value
Amb Temperature	24.3°C
Area analysis	Value
L2Max	98.1°C
U1Max	77.7°C
D3Max	59.6°C

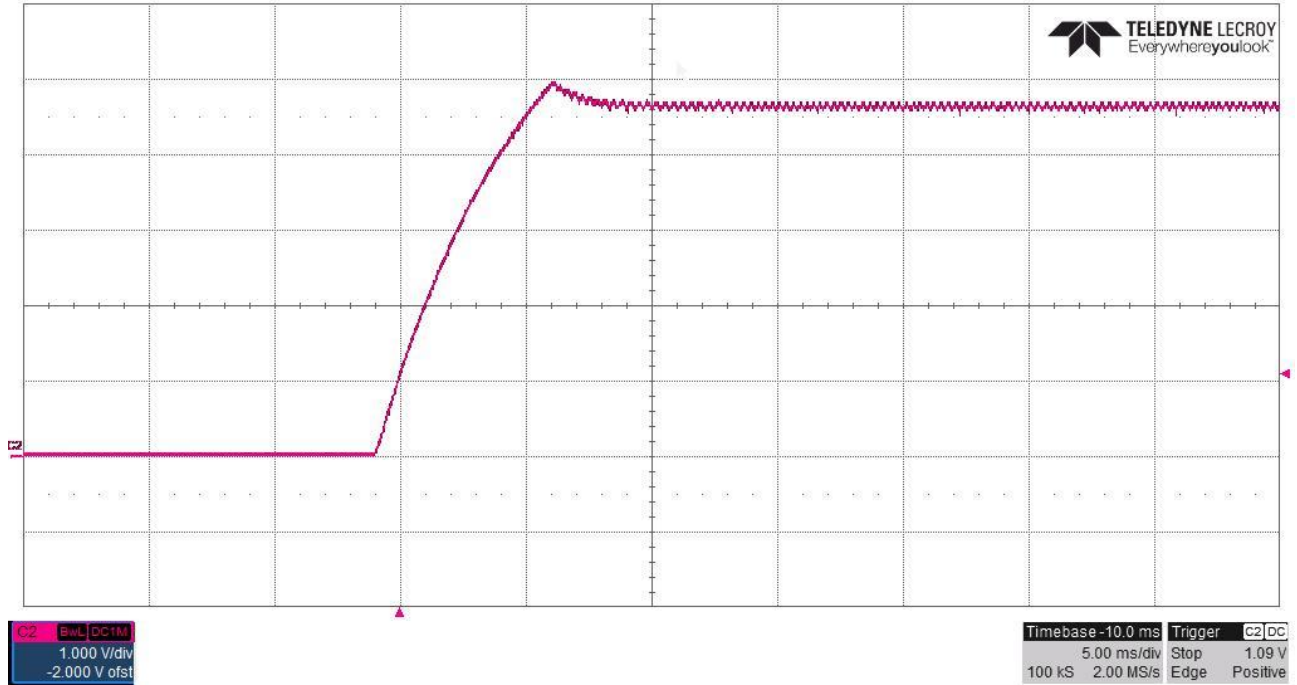
$V_{in}=230V_{AC}/60Hz$ 


Spot analysis	Value
Amb Temperature	24.5°C
Area analysis	Value
L2Max	105.8°C
U1Max	90.0°C
D3Max	65.6°C

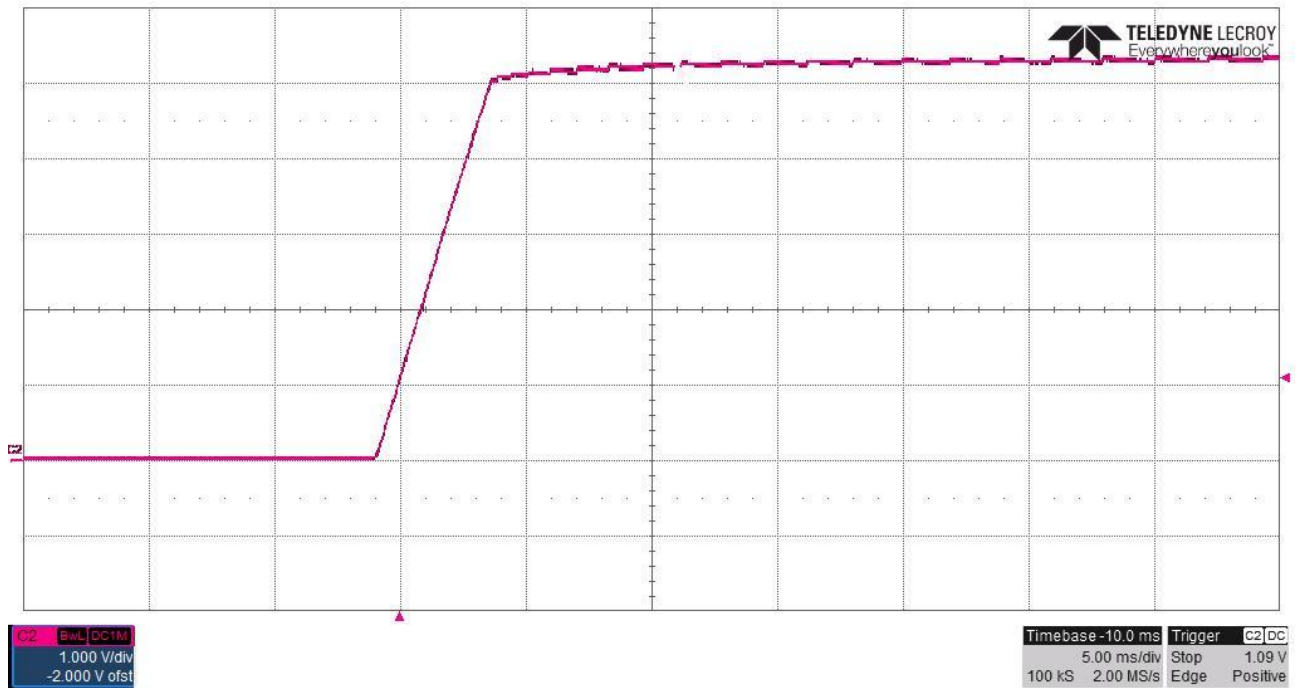
## 4 Startup Waveforms

The output voltages at startup are shown in the images below.

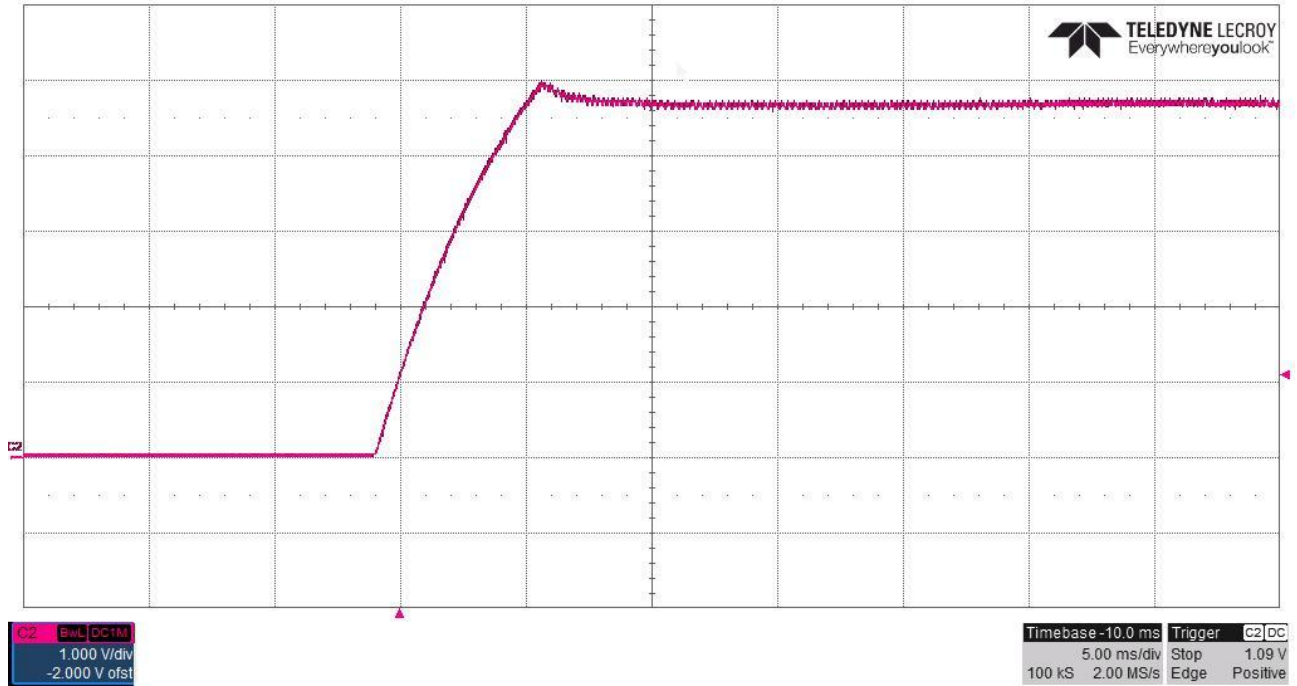
### 4.1 Start Up @ 120V<sub>AC</sub>: 5V/0.2A.



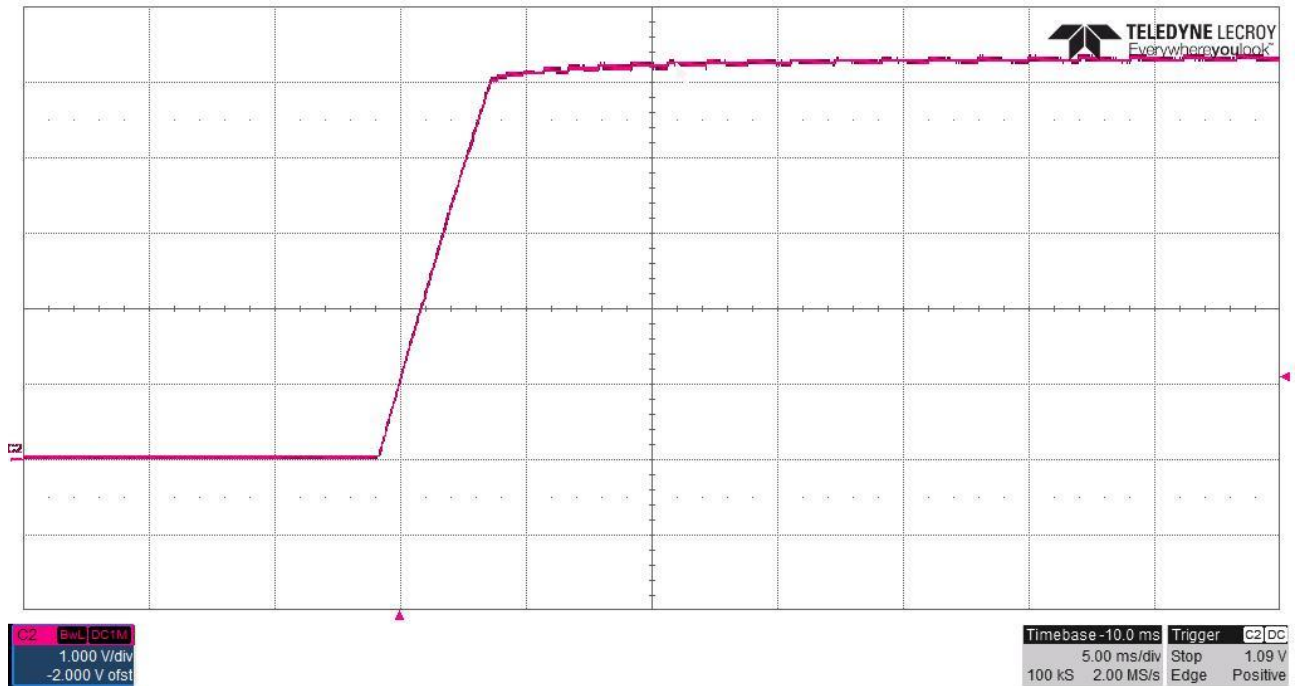
### 4.2 Start Up @ 120V<sub>AC</sub>: no load.



### 4.3 Start Up @ 230V<sub>AC</sub>: 5V/0.2A.



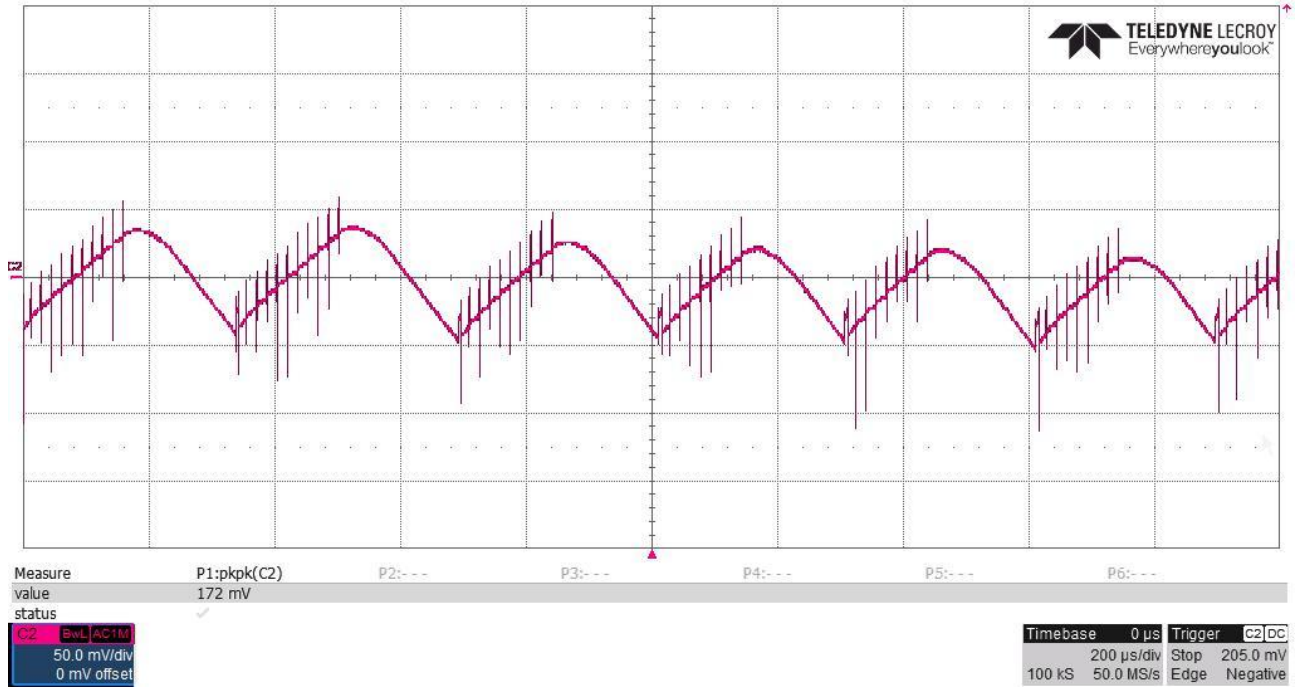
### 4.4 Start Up @ 230V<sub>AC</sub>: no load.



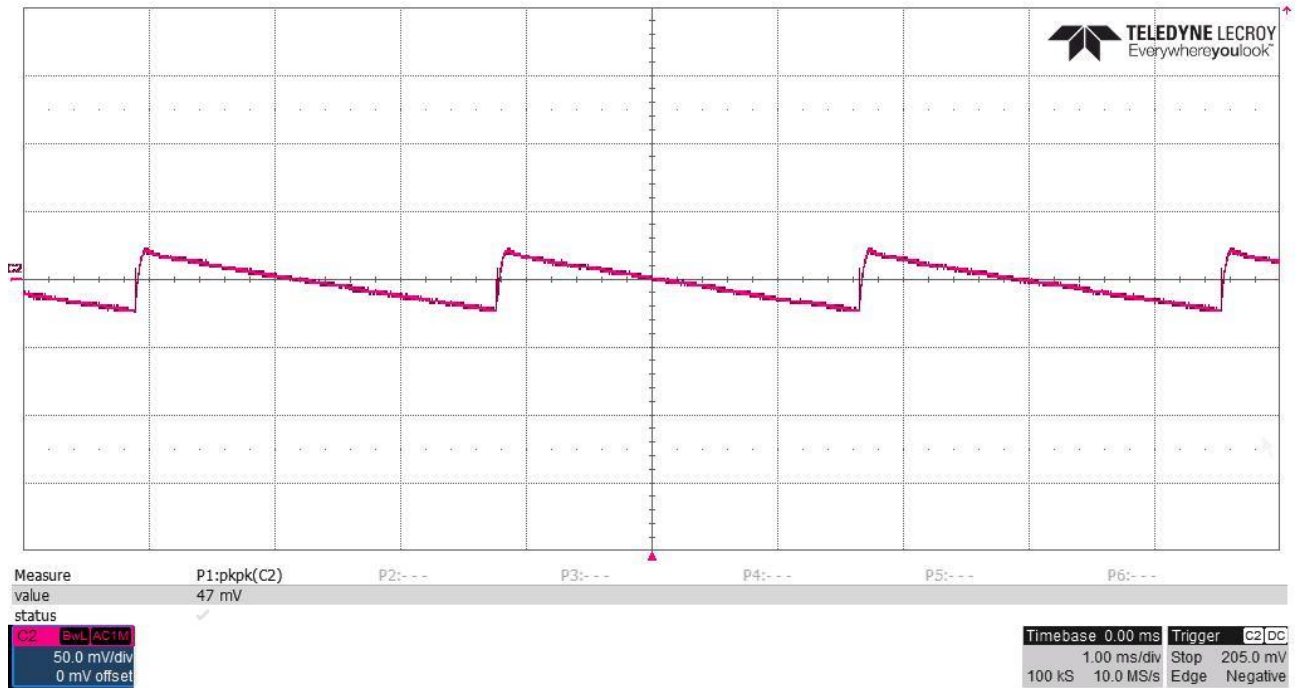
## 5 Output Ripple Voltages

The output ripple voltages are shown in the plots below.

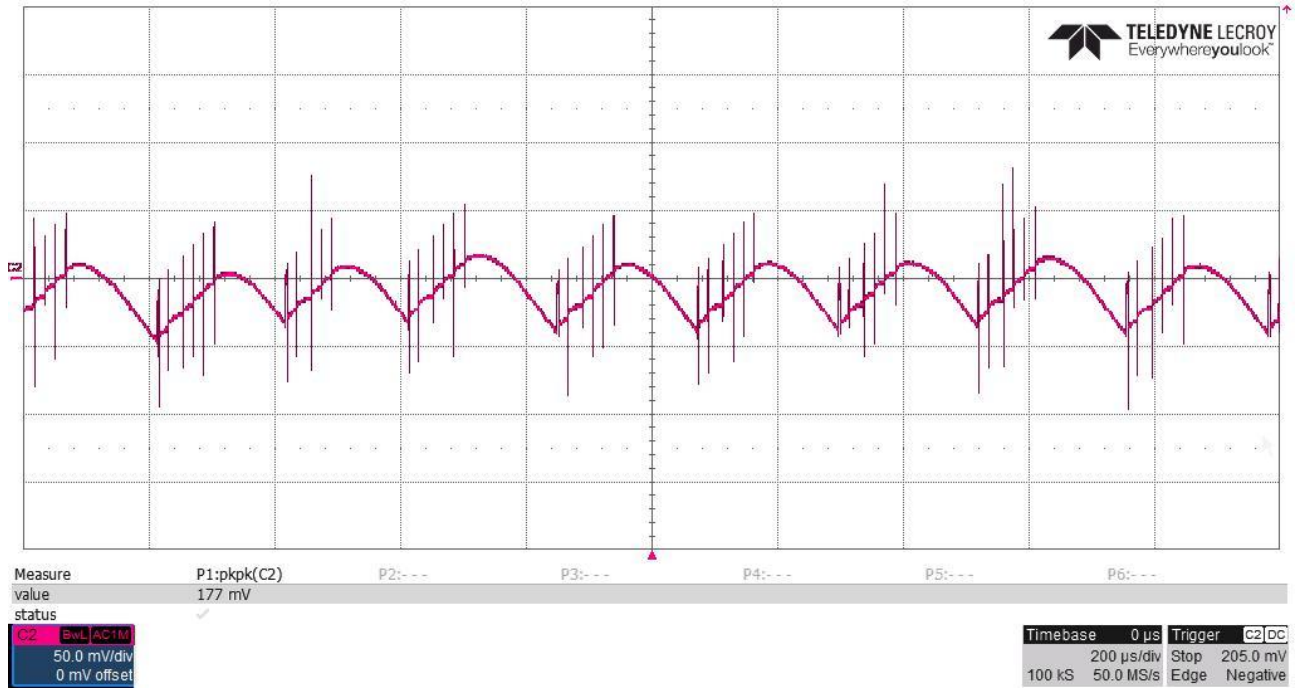
### 5.1 120V<sub>AC</sub>: 5V/0.2A:



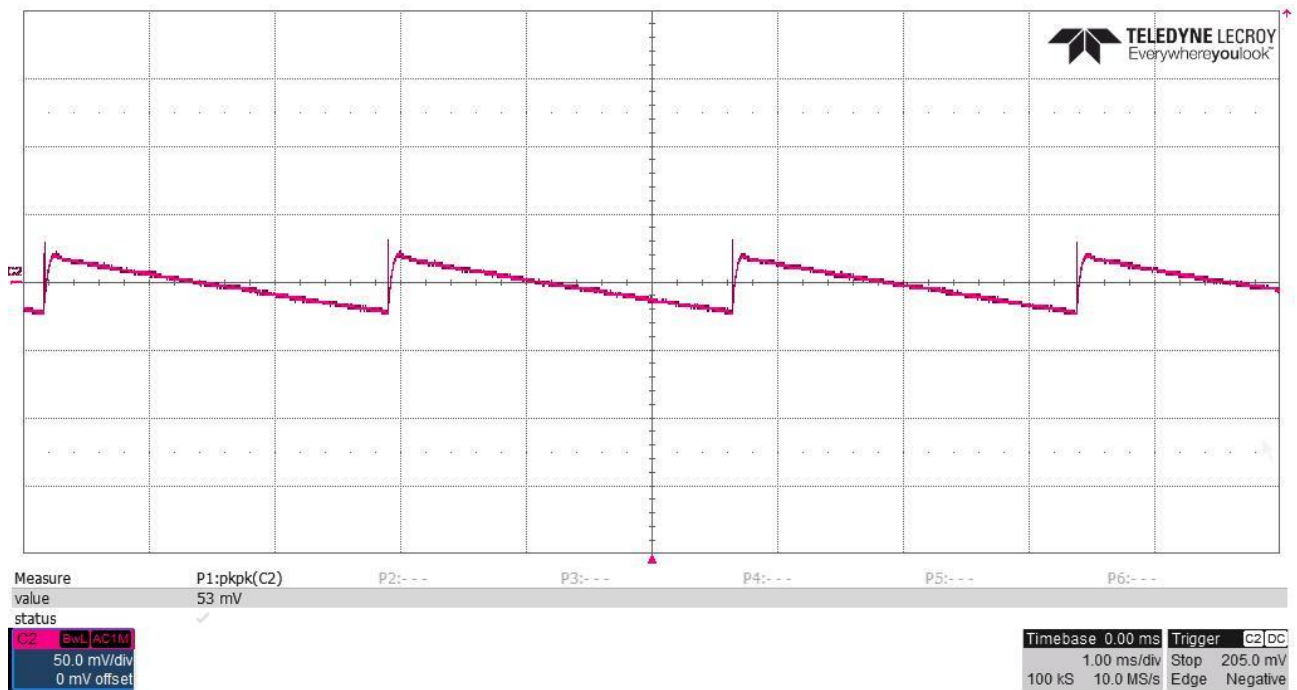
### 5.2 120V<sub>AC</sub>: no load:



### 5.3 230V<sub>AC</sub>: 5V/0.2A:

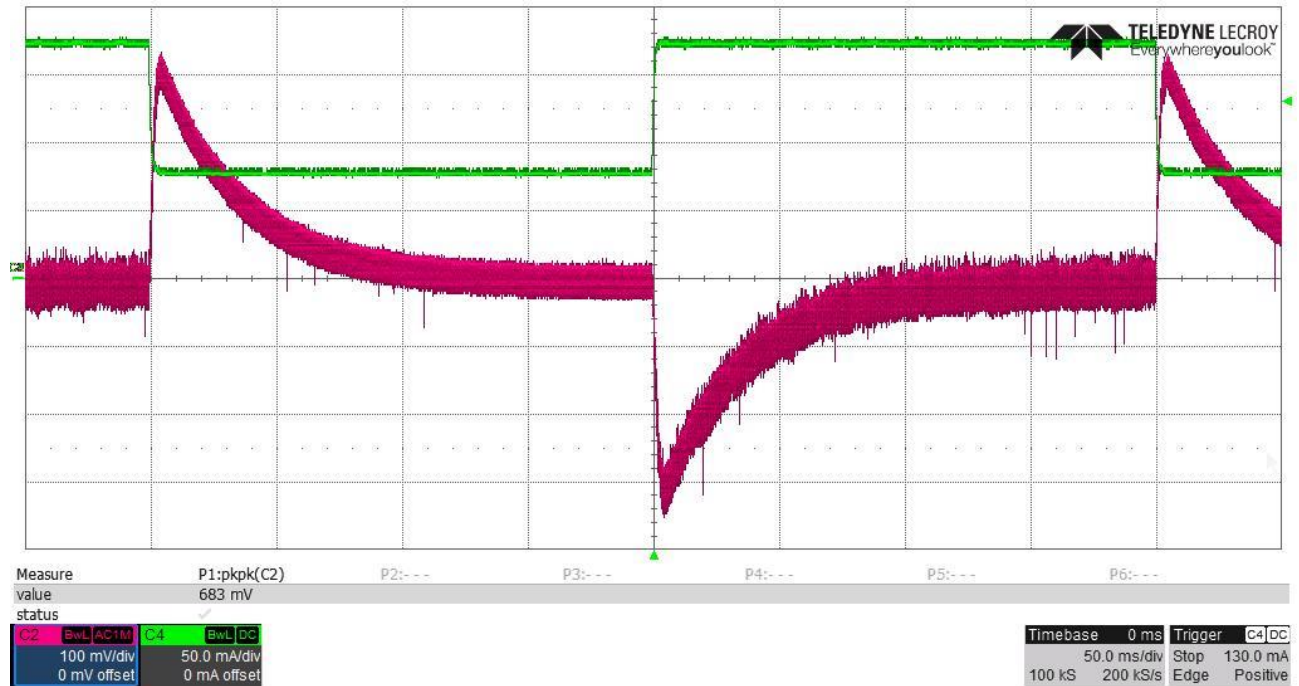


### 5.4 230V<sub>AC</sub>: no load:



## 6 Load Transient

The image below shows  $5V_{out}$  voltage response to a **0.1A** to **0.2A** load transient at  $120V_{AC}/60Hz$ .





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