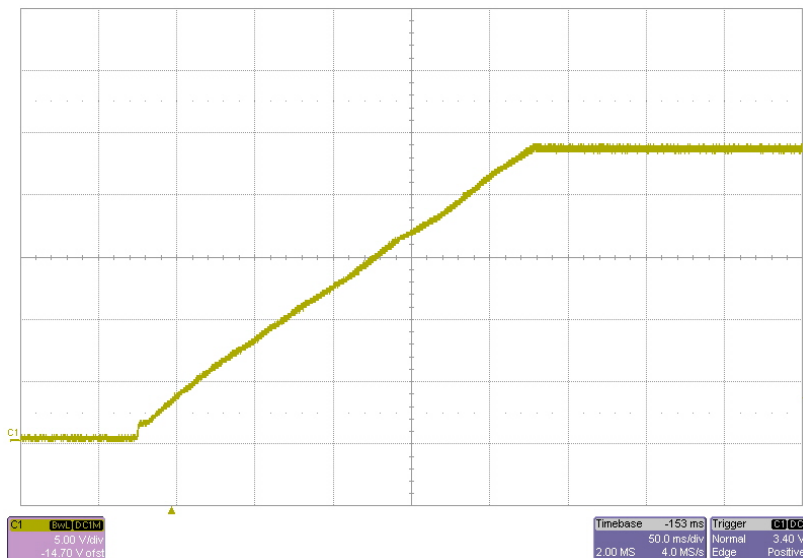


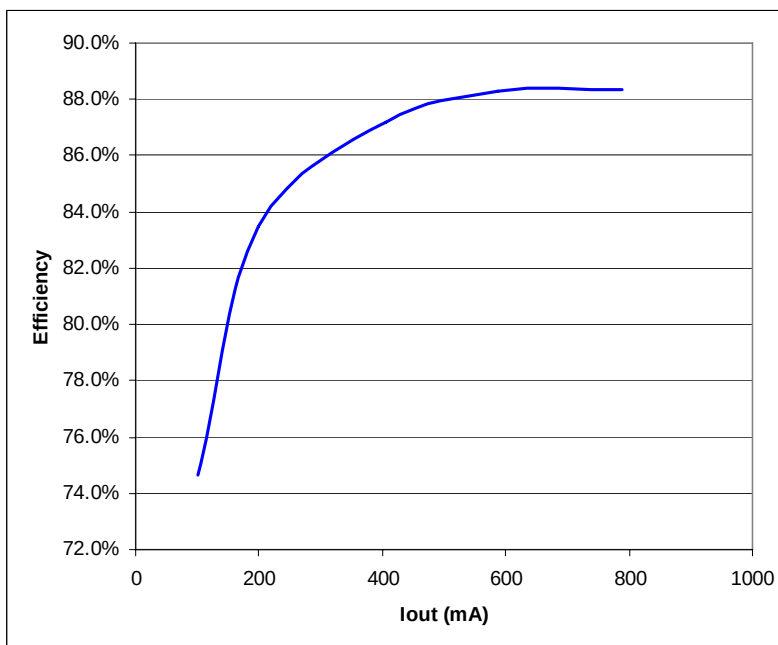
## 1 Startup

The startup waveform is shown in the figure below. The input voltage was set at 24V, with 0.8 A load on the output.



## 2 Efficiency

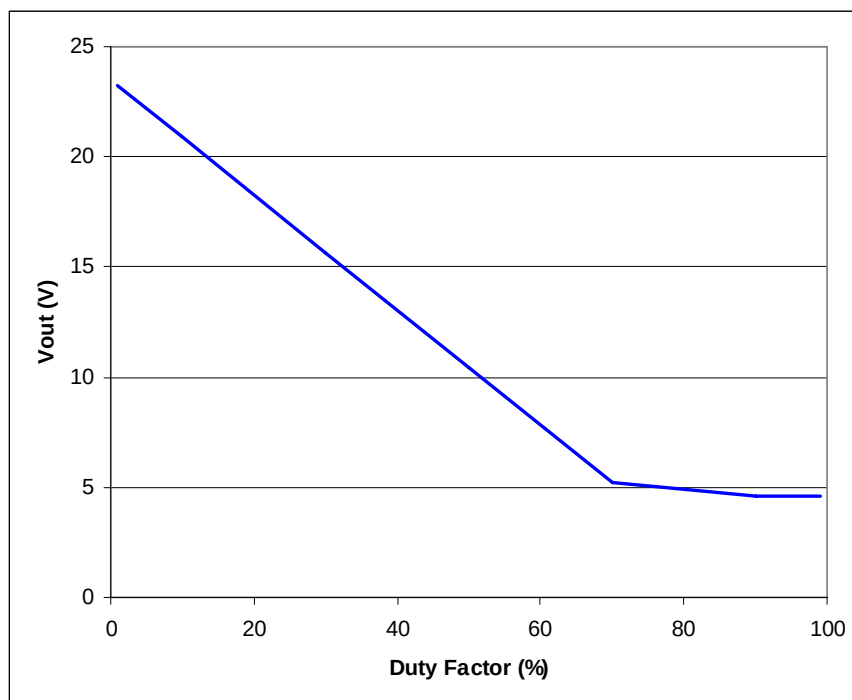
The efficiency is shown in the figure below.  $V_{out} = 23.25$  volts.



# PMP5083 Test Results

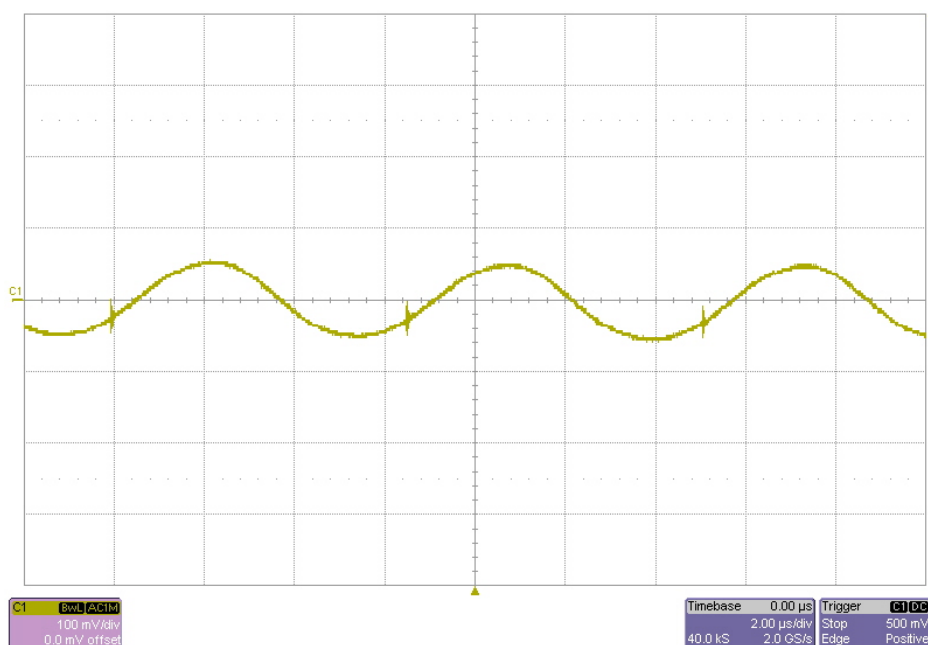
## 3 Primary Side Regulation

The variation in output voltage versus control duty factor is shown in the graph below.



## 4 Output Ripple Voltage

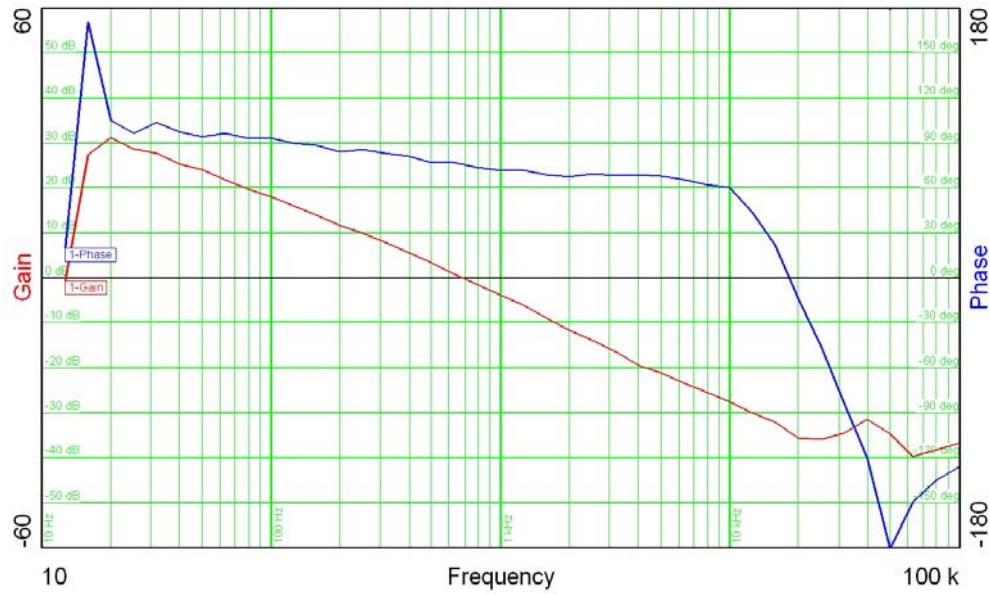
The output ripple voltage is shown in the figure below. The image was taken with a 0.8 A load and minimum duty factor (Vout = 23.25V). 100 mV/div Vertical and 2.0  $\mu$ S/div Horizontal.



# PMP5083 Test Results

## 5 Control Loop Frequency Response

The figure below shows the loop responses with a 24V input, and a 0.8 A load.



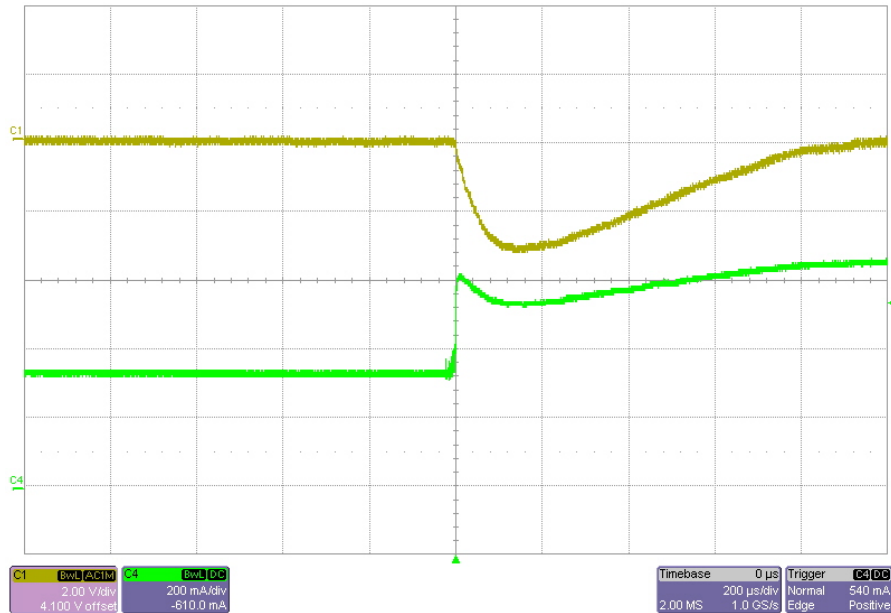
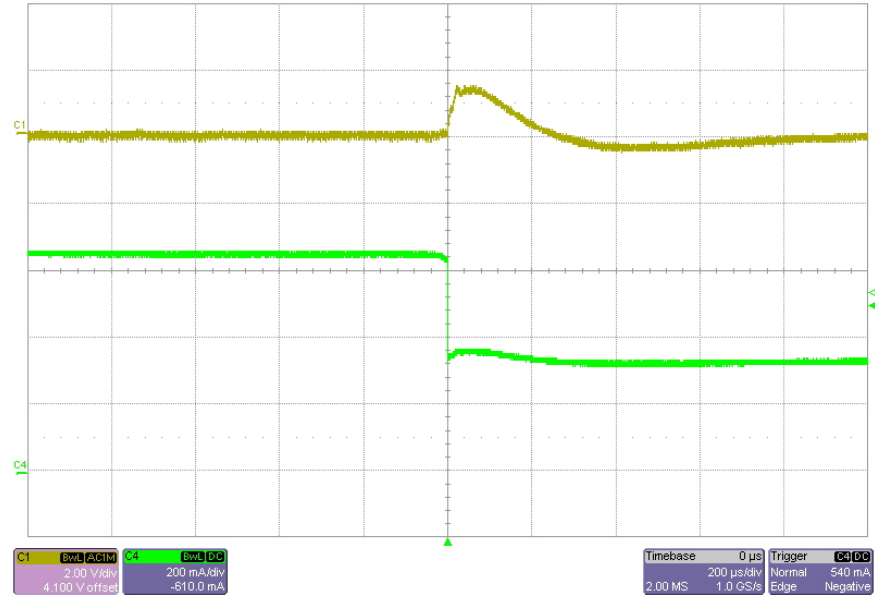
# PMP5083 Test Results

## 6 Load Transients

The figures below show the output response to load transients. The input voltage was set to 24V.

Channel 1 : Vout (AC coupled)

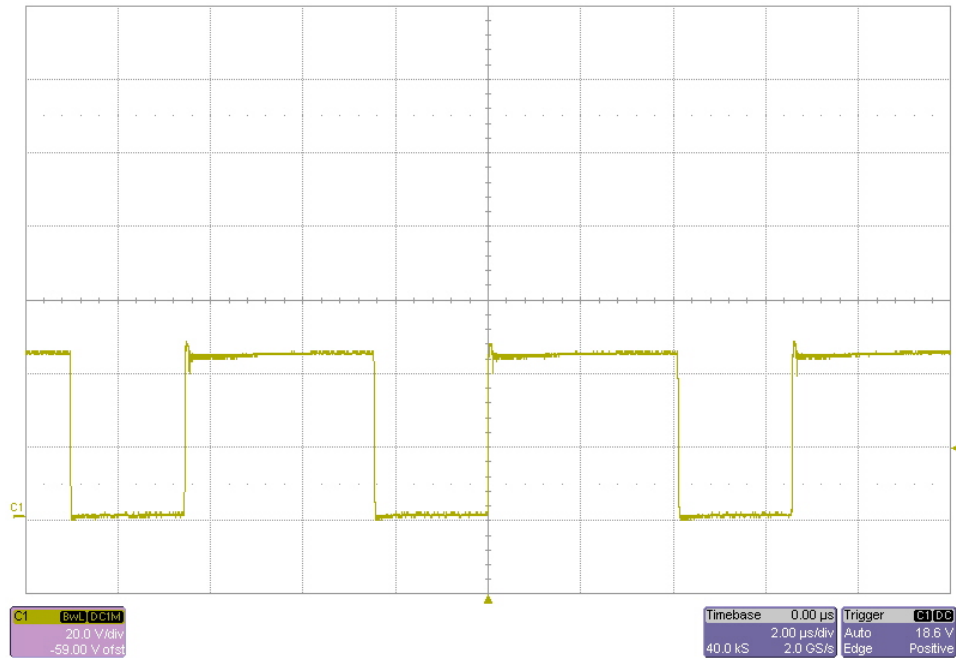
Channel 4 : Load current



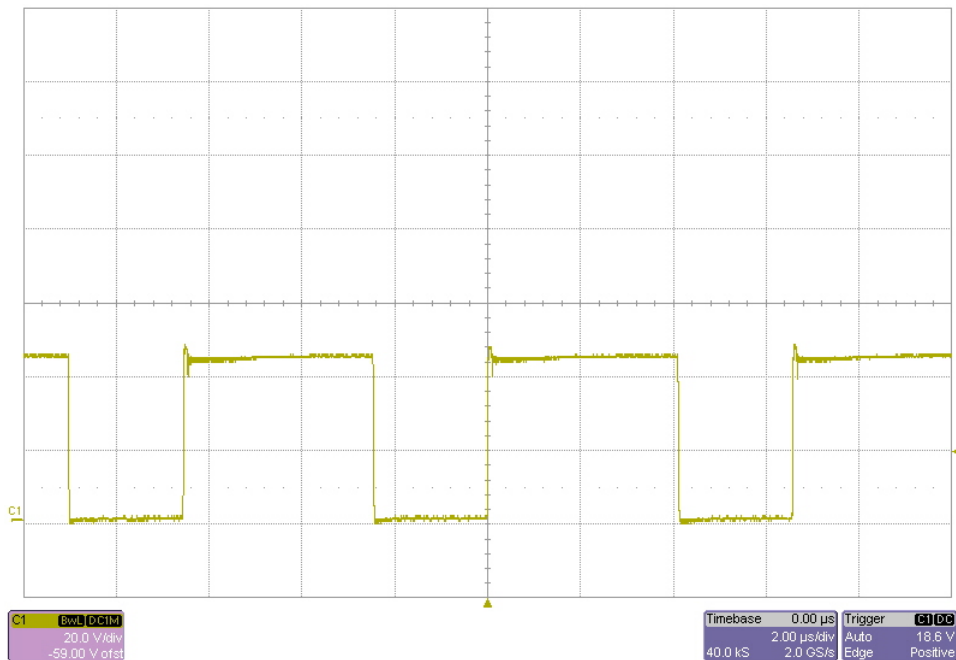
## 7 Switch Node Waveforms

The following figures show the switch node waveforms at full load and 28 volts in.

MOSFET Drain

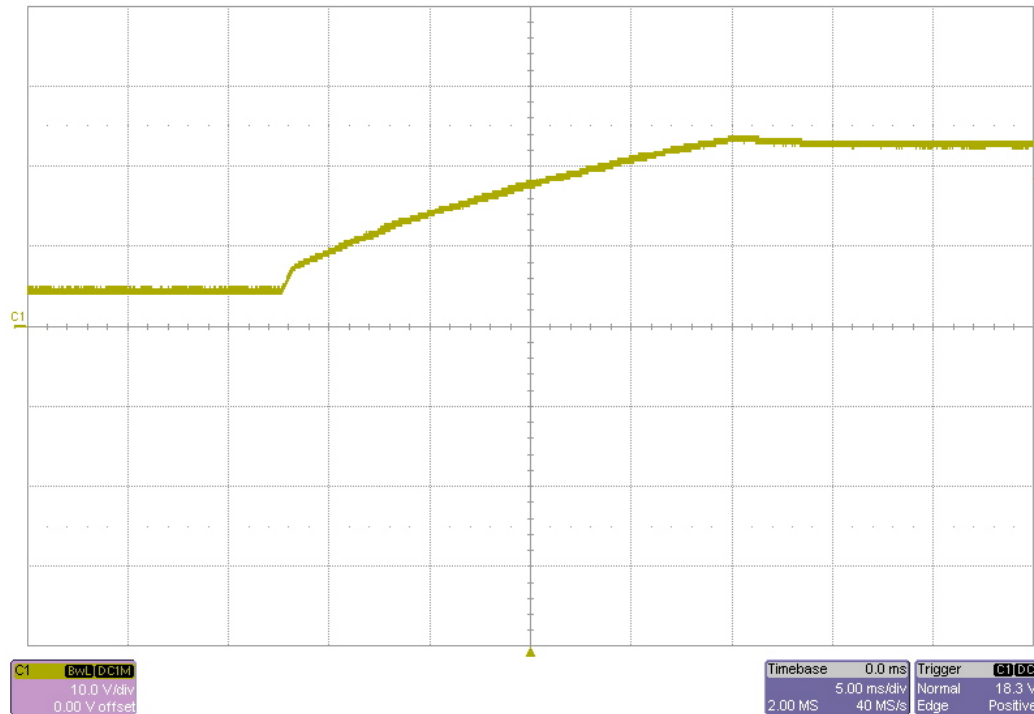


Output Diode



## 8 Control Response

The following picture is the output response to a step change in duty factor.



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| Interface                   | <a href="http://interface.ti.com">interface.ti.com</a>             | Energy                     | <a href="http://www.ti.com/energy">www.ti.com/energy</a>                                 |
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