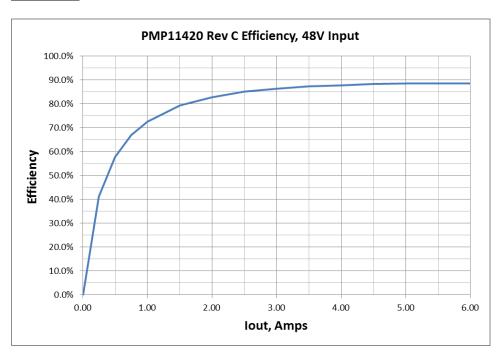
All measurements taken with a 48V input unless otherwise noted.

Efficiency



J2	J2	J1	J1	
<u>lout</u>	<u>Vout</u>	<u>lin</u>	<u>Vin</u>	<u>Eff</u>
0.00	5.051	0.038	48.00	0.0%
0.25	5.050	0.064	48.00	41.1%
0.50	5.050	0.091	48.00	57.8%
0.75	5.050	0.118	48.00	66.9%
1.00	5.049	0.145	48.00	72.5%
1.50	5.049	0.199	48.00	79.3%
2.00	5.048	0.254	48.00	82.8%
2.50	5.047	0.309	48.00	85.1%
3.00	5.046	0.365	48.00	86.4%
3.50	5.046	0.421	48.00	87.4%
4.00	5.045	0.479	48.00	87.8%
4.50	5.044	0.536	48.00	88.2%
5.00	5.043	0.594	48.00	88.4%
5.50	5.042	0.653	48.00	88.5%
6.00	5.041	0.712	48.00	88.5%

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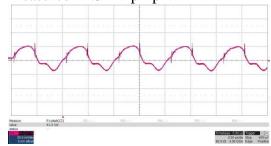
Ripple and Noise

Ripple measurements taken with a 6A load and 20MHz BWL.

Output Ripple (J2) 20mV/div, 2usec/div

Measured 33.3mV pk-pk:

Input Ripple (J1) 20mV/div, 2usec/div Measured 41.3mV pk-pk:



Dynamic Loading

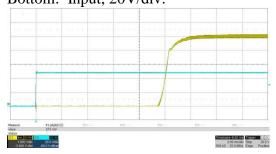
Load Step 3A to 6A step load 200mV/div, 500usec/div



Turn On Response

6A Load, 2msec/div Top: Output, 1V/div Bottom: Input, 20V/div:

0A Load, 2msec/div Top: Output, 1V/div Bottom: Input, 20V/div:

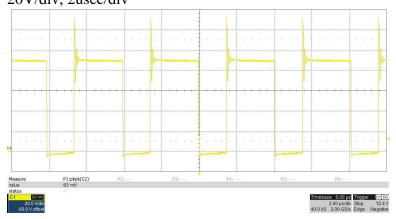


PMP11420 REV C TEXAS INSTRUMENTS

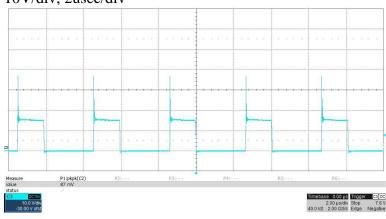
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Waveforms

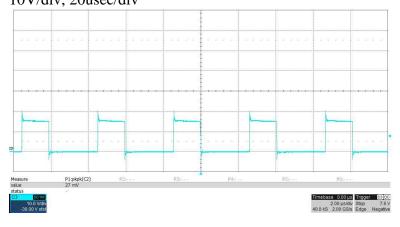
Vds, Q3, 60V Input, 6A Load 20V/div, 2usec/div



Vds, Q1, 60V Input, 0A Load 10V/div, 2usec/div

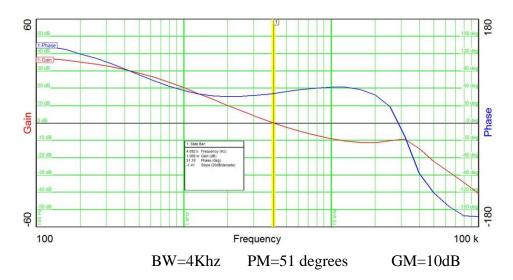


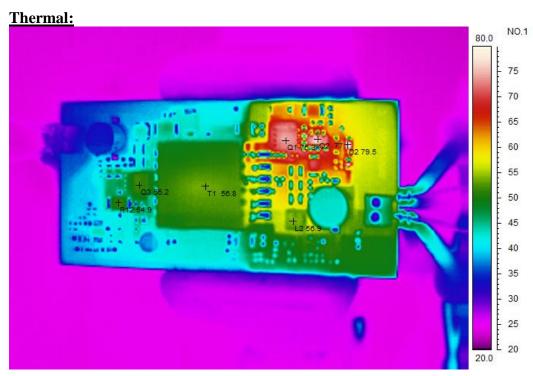
Vds, Q1, 60V Input, 6A Load 10V/div, 20usec/div



Stability

Loop response of the converter with a 6A load.





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Photo:



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