

**Test Data
For PMP7931
3/20/2013**



Vin	12V
Vout	50V
Iout Max	0.8A
Fsw	300kHz

FABRICATION

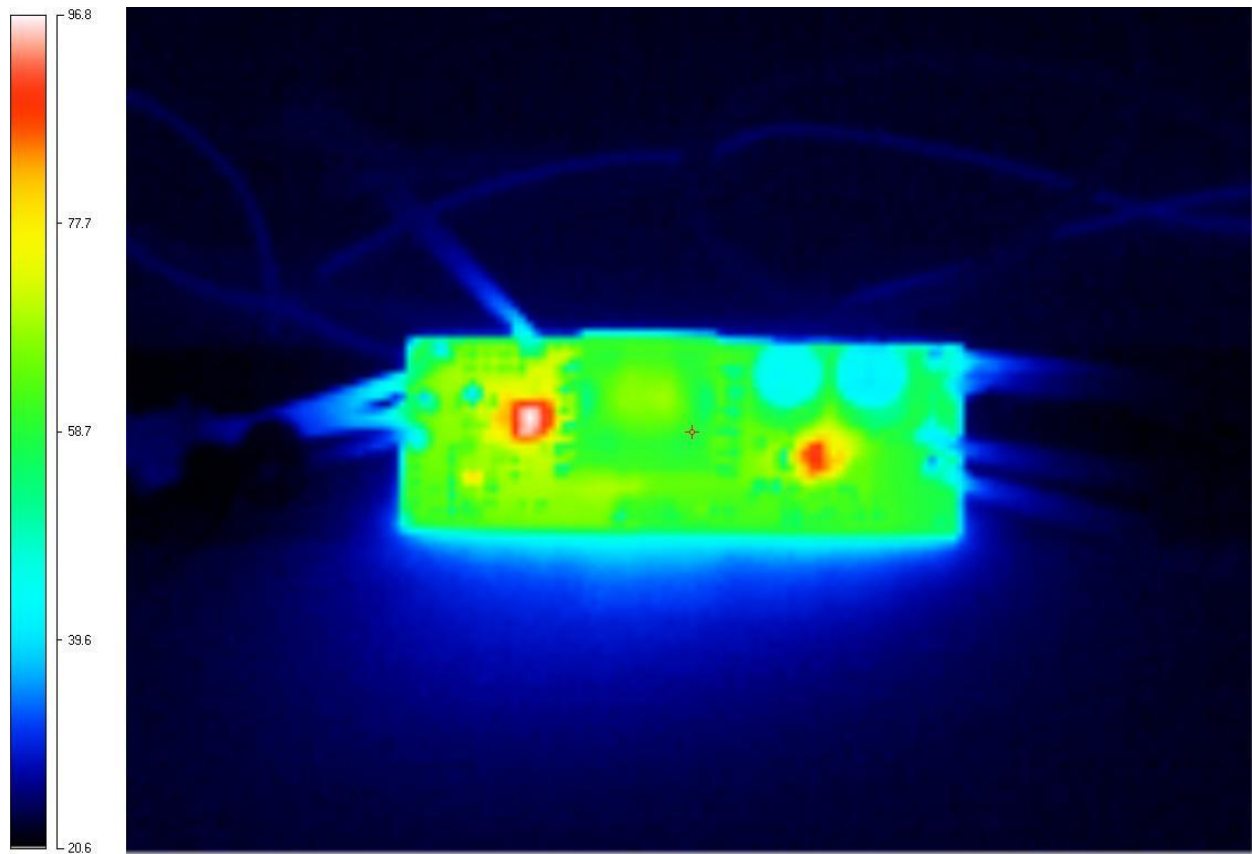
Board Dimensions: 1.5' X 4.0'

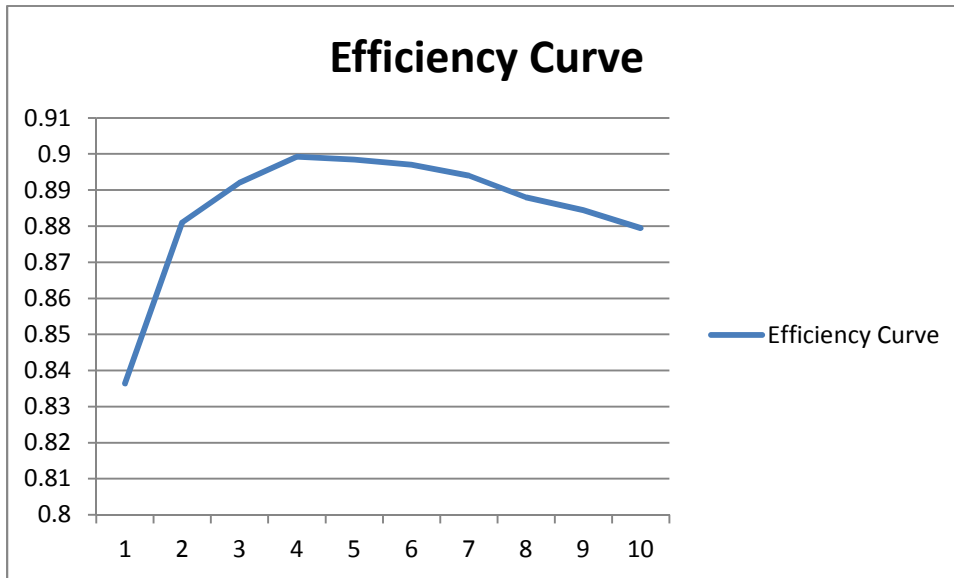
Top Side



Thermal Image #1.

Vin 12V With a load of 0.8A Steady State Temp.



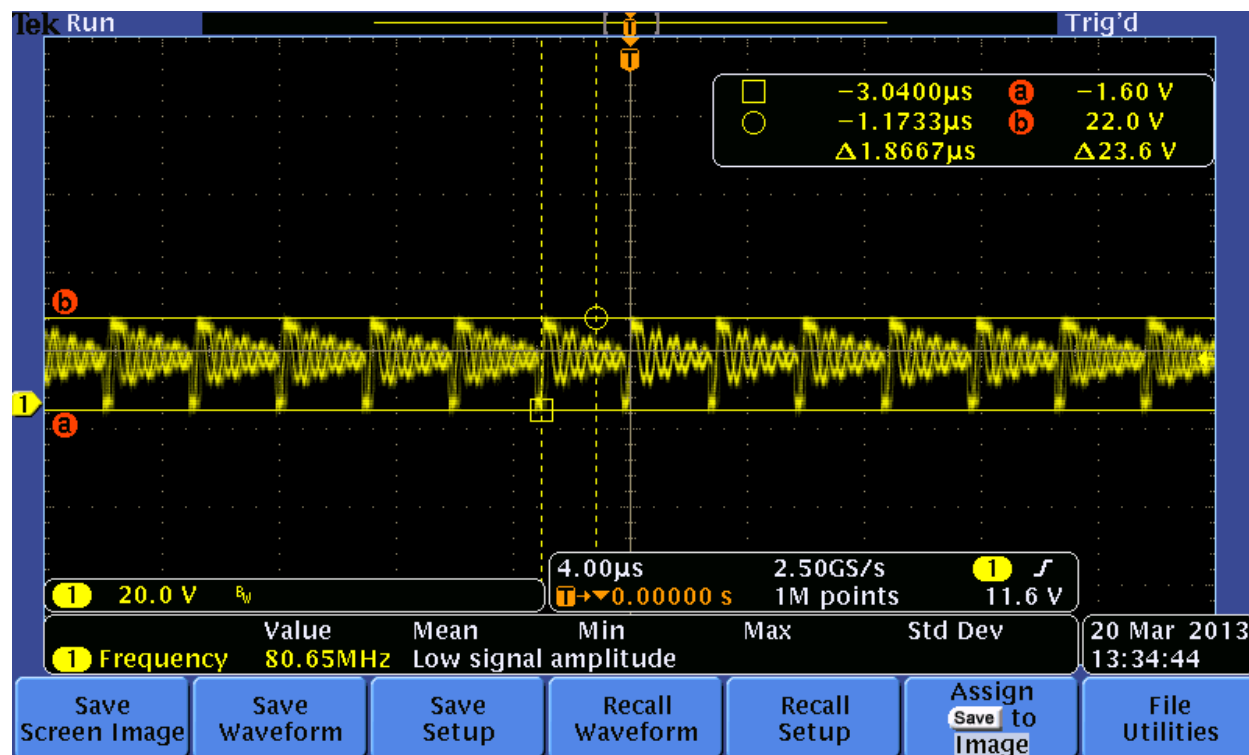
Efficiency Curve Data


Vin	lin	Vout	Iout	Pin	Pout	EFF
12	0.414	50.67	0.082	4.968	4.15494	0.836341
12	0.805	50.66	0.168	9.66	8.51088	0.881043
12	1.15	50.66	0.243	13.8	12.31038	0.892057
12	1.502	50.65	0.32	18.024	16.208	0.899245
12	1.907	50.64	0.406	22.884	20.55984	0.898437
12	2.267	50.63	0.482	27.204	24.40366	0.897061
12	2.68	50.62	0.568	32.16	28.75216	0.894035
12	3.058	50.6	0.644	36.696	32.5864	0.88801
12	3.432	50.59	0.72	41.184	36.4248	0.884441
12	3.863	50.58	0.806	46.356	40.76748	0.879443

Waveforms

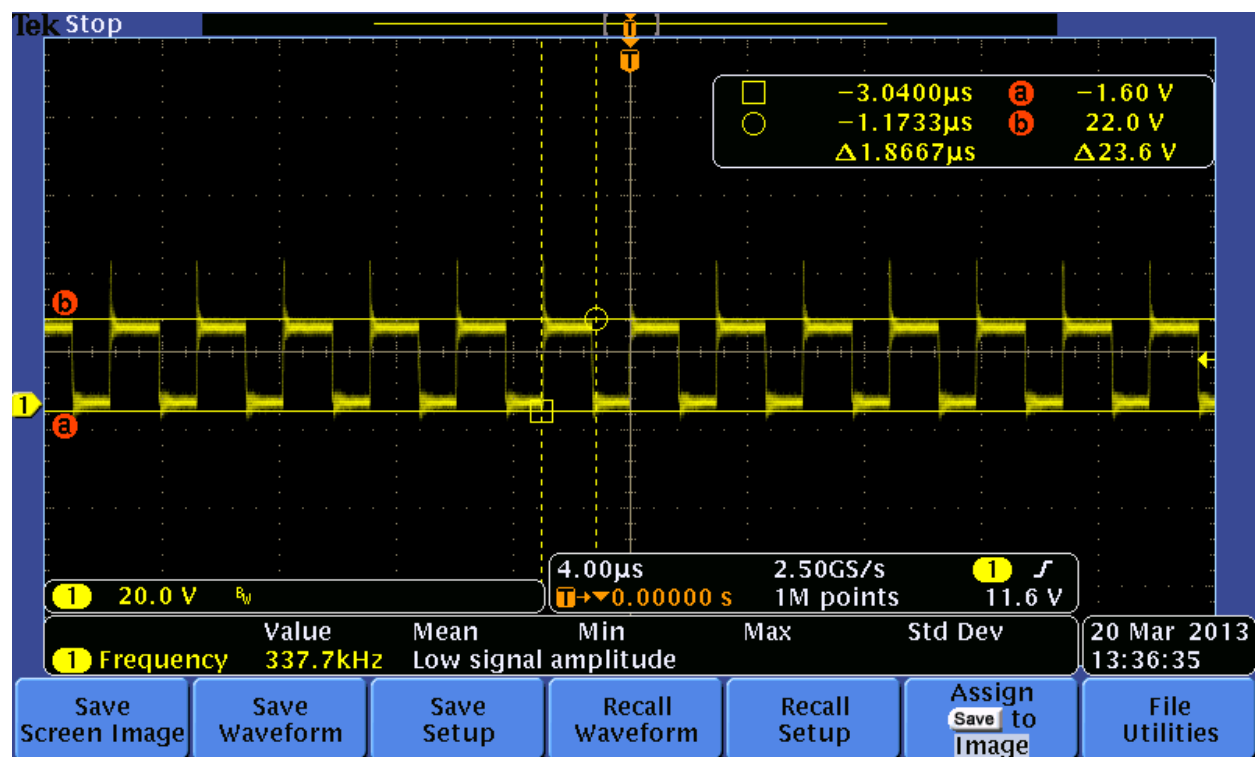
CH1 Primary Switch node

Vin 12V with no load.



CH1 Primary Switch node

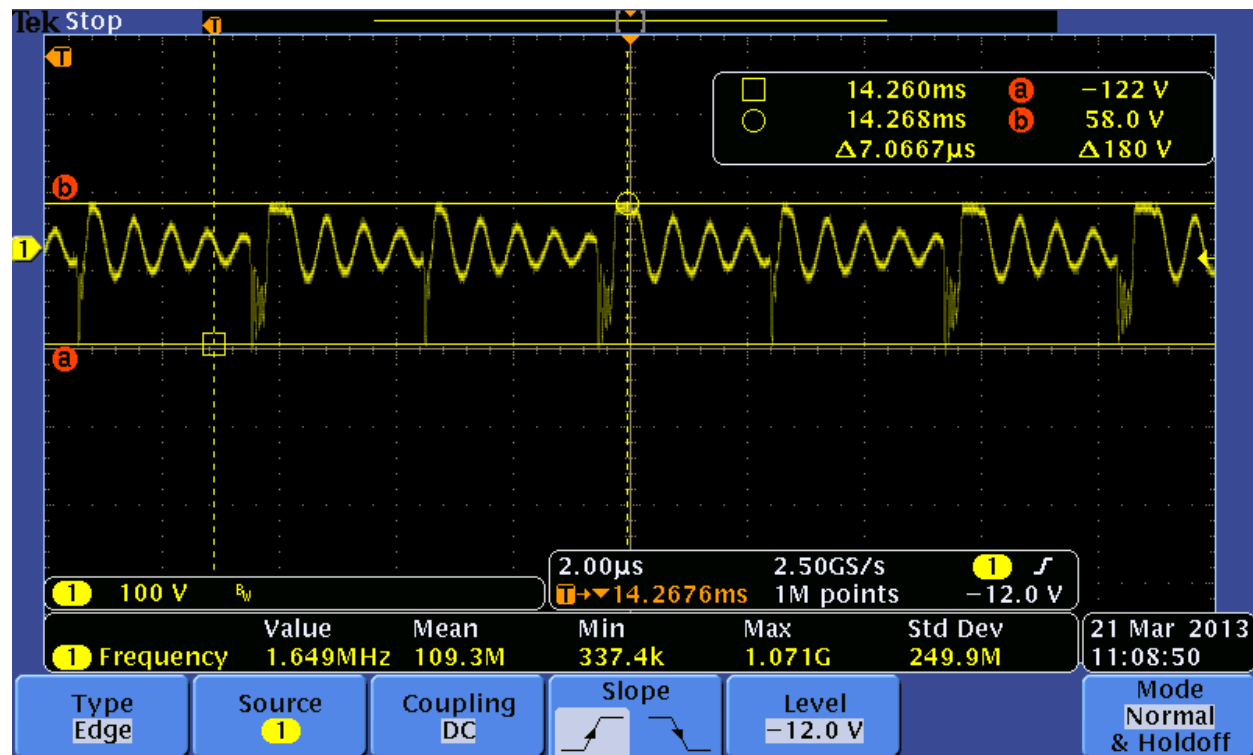
Vin 12V with 0.8A load.



Measured Switching Frequency = 337 kHz

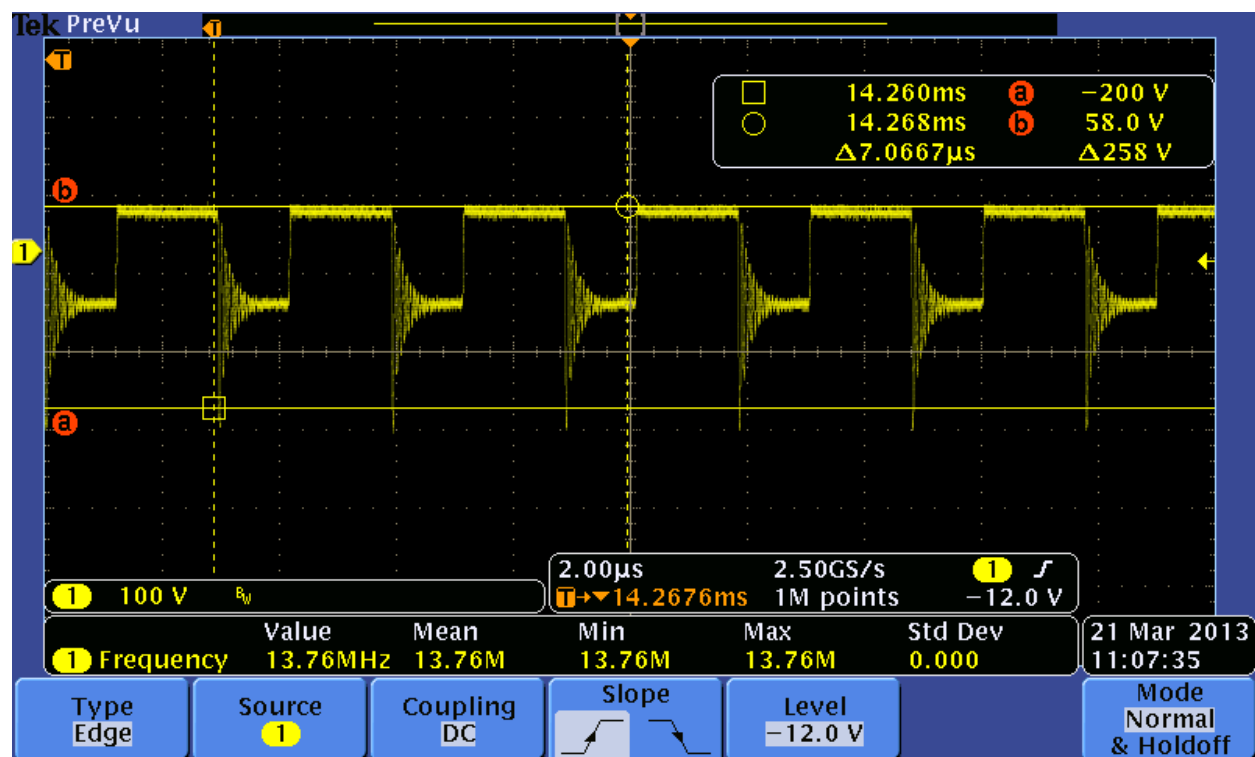
CH1 Secondary side Switch Node

Vin 12V with no load.



CH1 Secondary side Switch Node

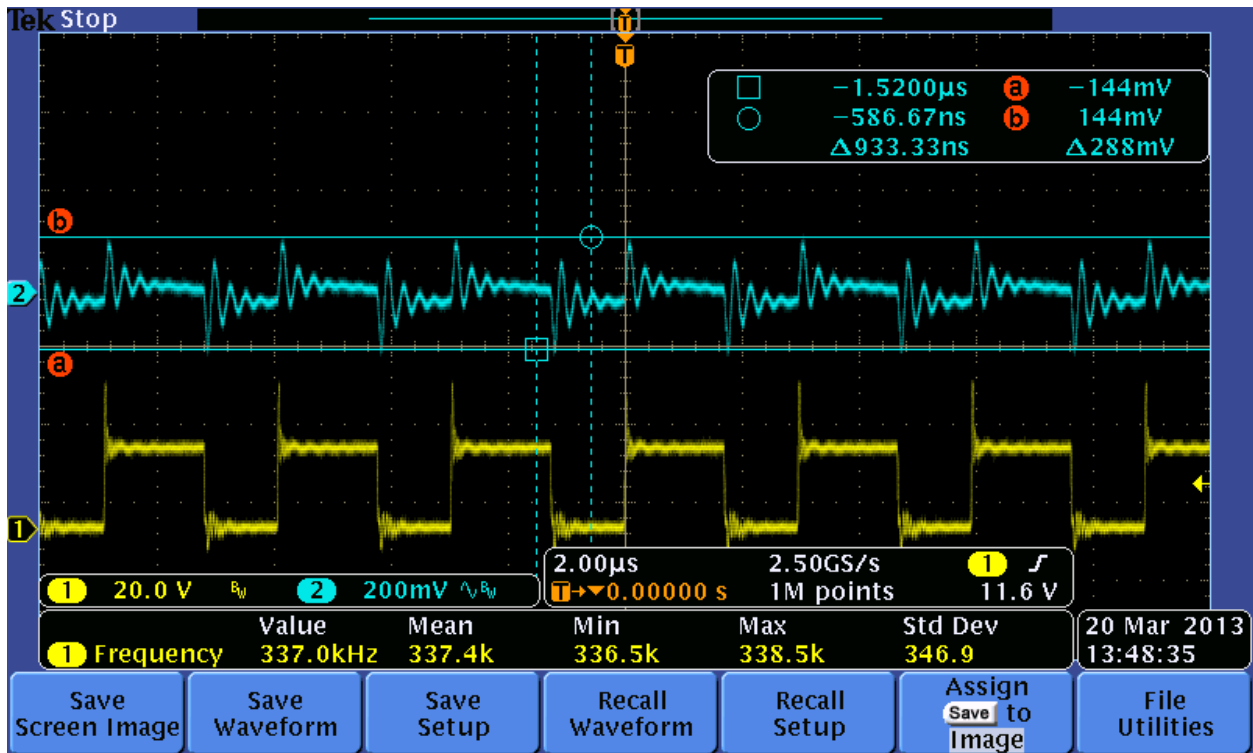
Vin 12V with 0.8A load.



CH1 Primary Switch node

CH3 output voltage ripple

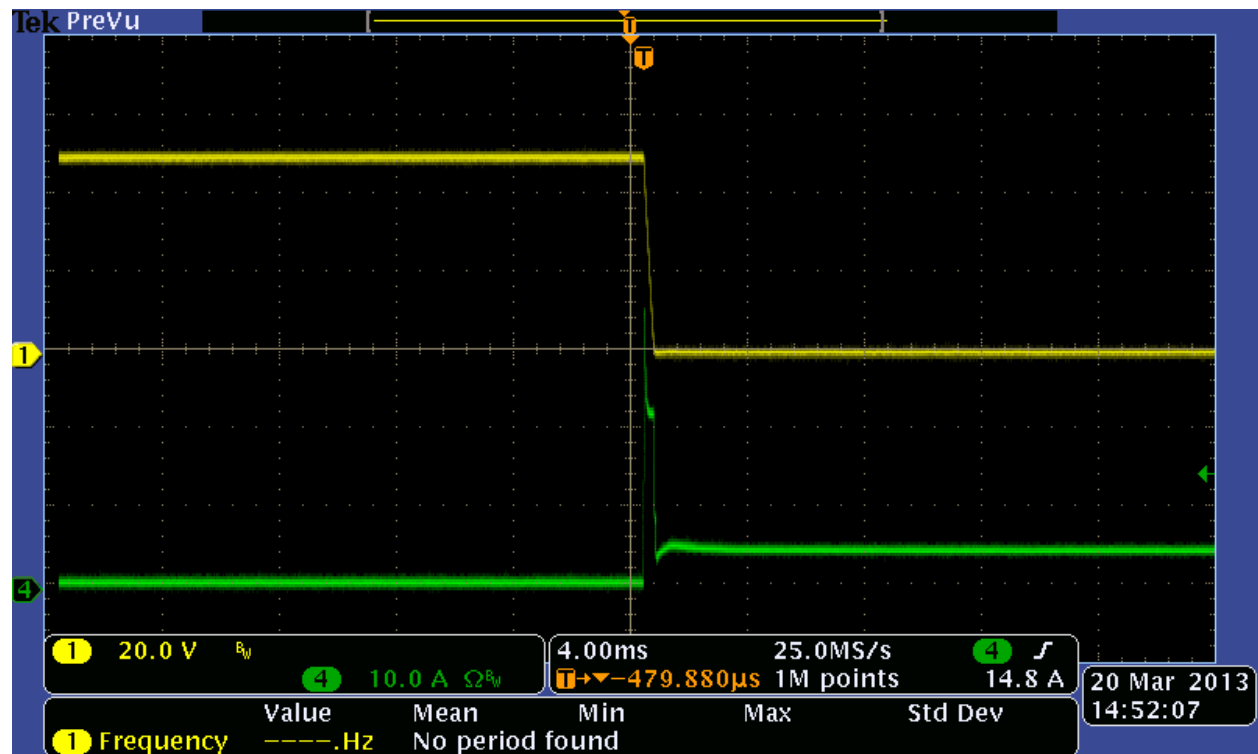
Vin 12 volts with a 0.8A load the output ripple voltage is 288mVp-p.



Short Circuit Test

CH1 Vout

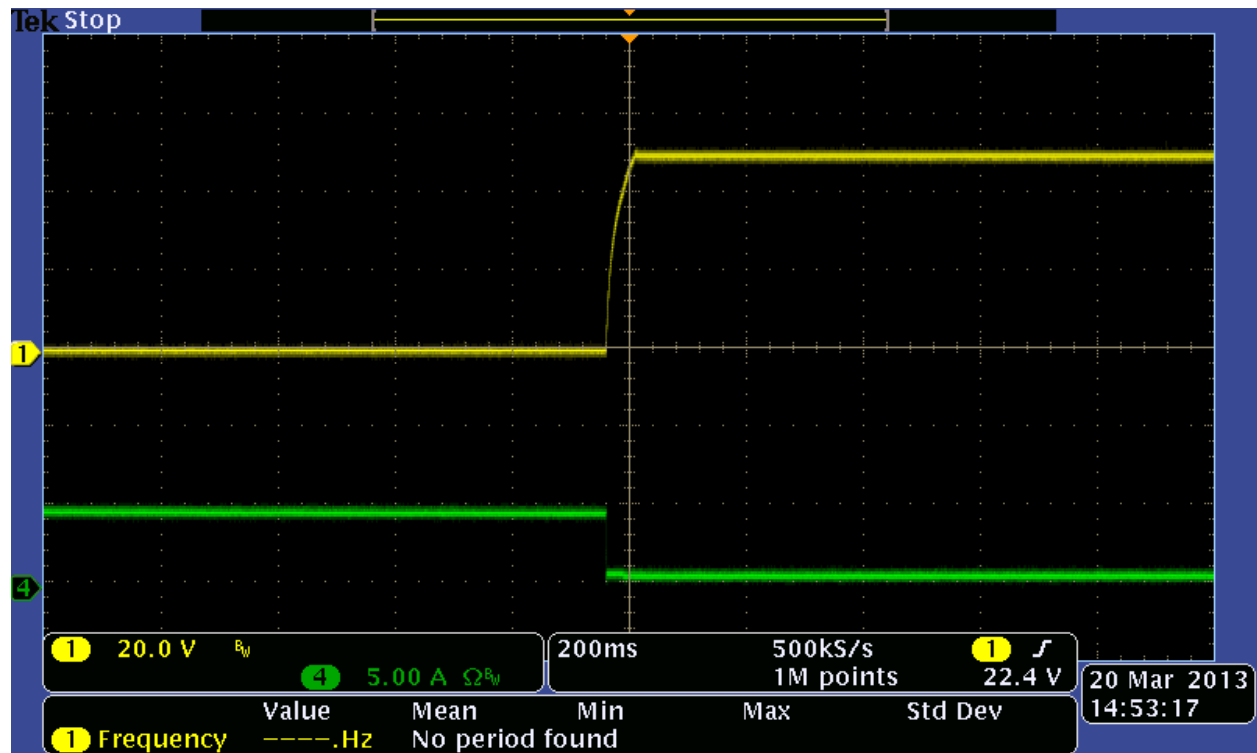
CH4 Iout



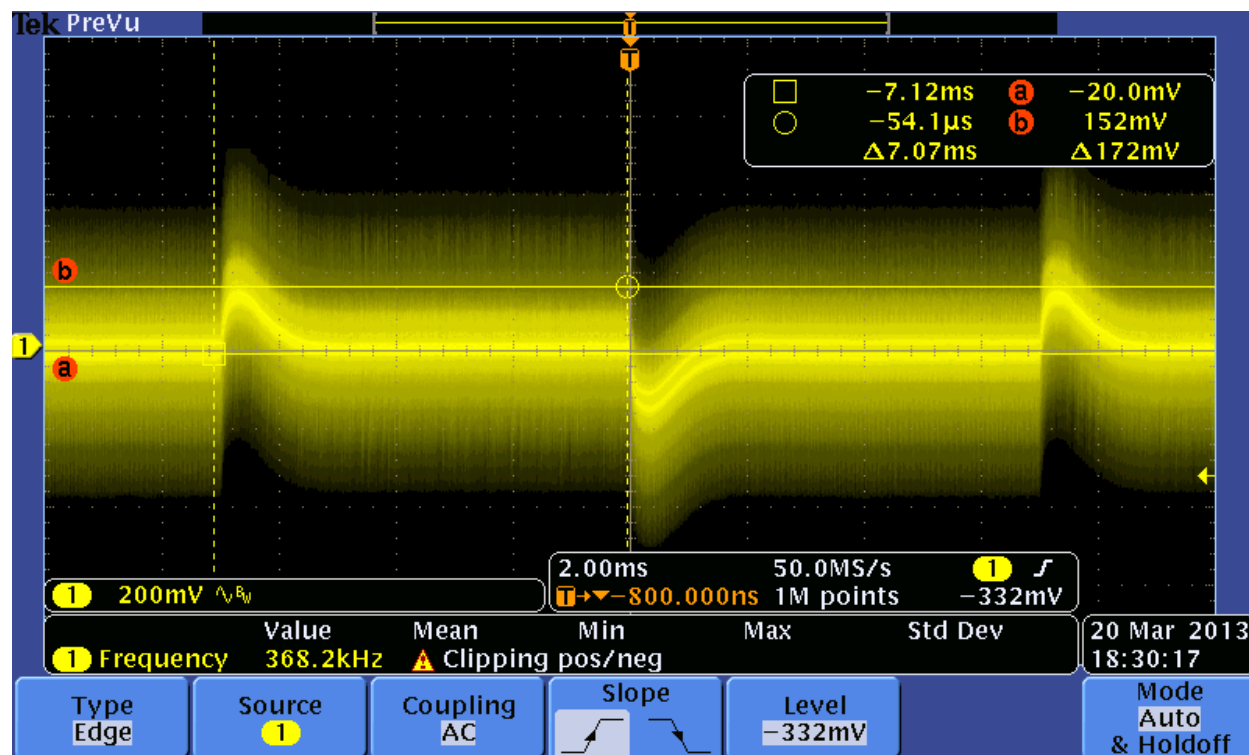
Short Circuit Recovery test

CH1 Vout

CH4 Iout



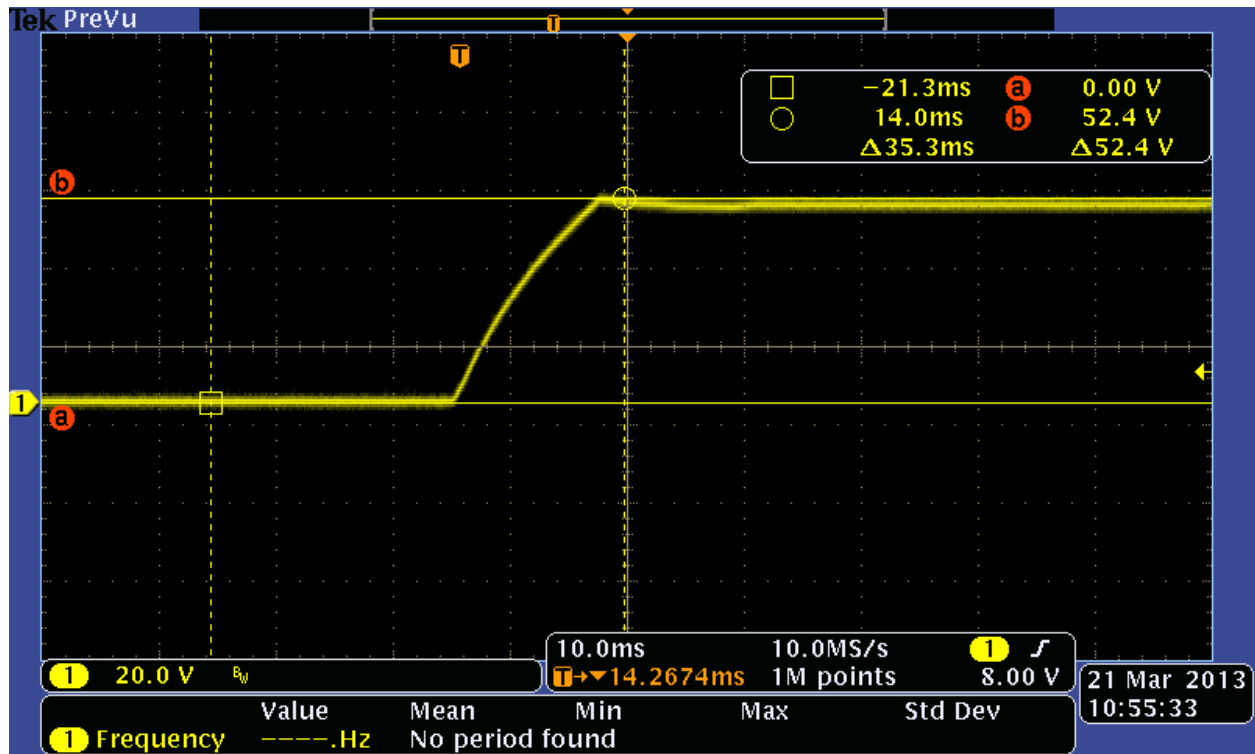
Transient response 12V in 0.4A to 0.8A 100mA/us Switching frequency 145 hz 50% duty cycle.



Start up Test

CH1 Vout

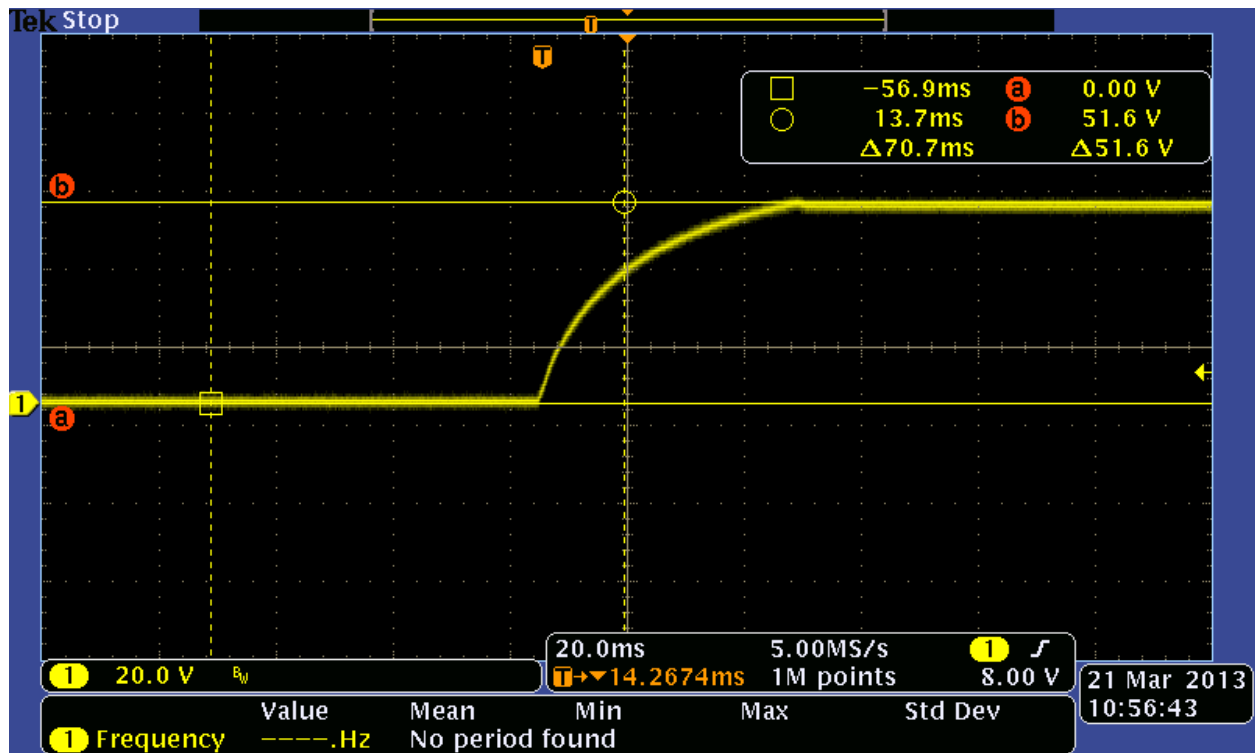
12V in with no load.



Start up Test

CH1 Vout

12V in with 0.8A load.



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