

1 Photo



2 EFFICIENCY

Since measuring AC to DC efficiency tends to be not as accurate, DC to DC efficiency was also measured. The DC was applied to the AC input at various output currents and 150 v DC.

vin	lin	pin	vout	iout	pout	efficiency
150	0.039	5.85	21.2	0.2	4.24	72.47863
150	0.086	12.9	21.2	0.5	10.6	82.17054
150	0.169	25.35	21.2	1	21.2	83.62919
150	0.334	50.1	21.2	2	42.4	84.63074

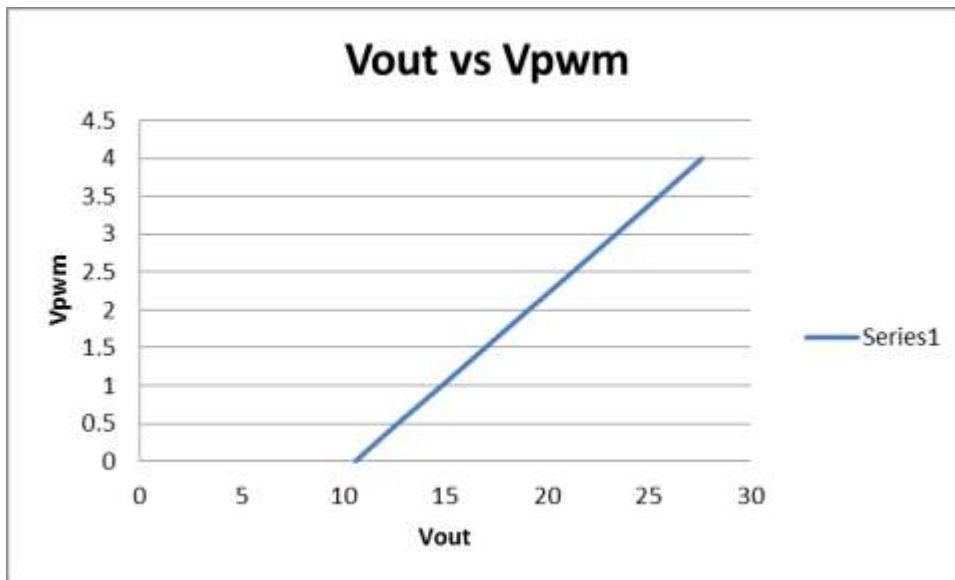
6/12/13 PMP8955 Test Results

From AC meter at 120 vac in

Vac	pin	iout	vout	pout	efficiency
120	6.045	0.2	21.2	4.24	70.14061
120	13.22	0.5	21.2	10.6	80.18154
120	25.35	1	21.2	21.2	83.62919
120	50.95	2	21.2	42.4	83.21884

3 Output characteristics vs. control signal

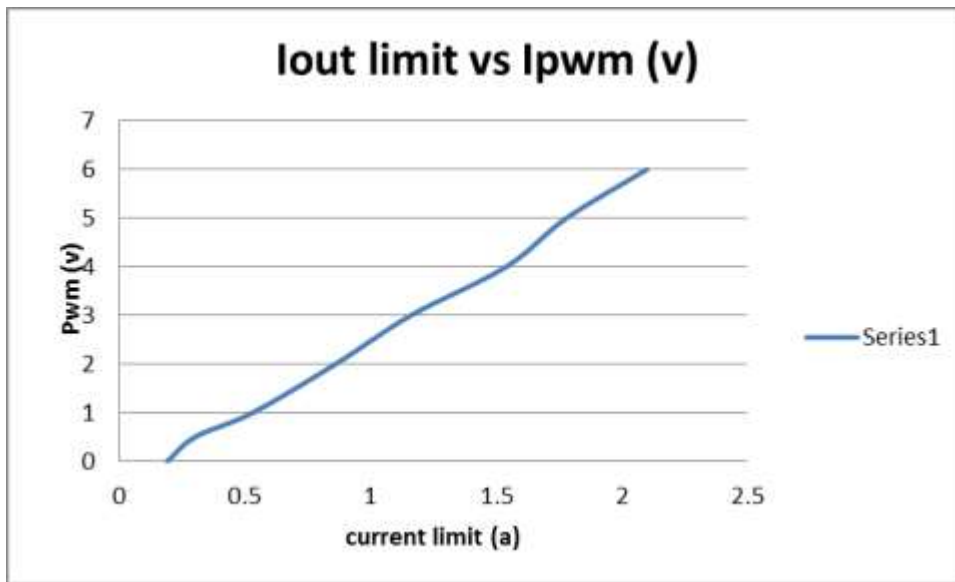
Vout	Vpwm
21.2	open
10.58	0
12.66	0.5
14.83	1
19.09	2
23.38	3
27.6	4



6/12/13

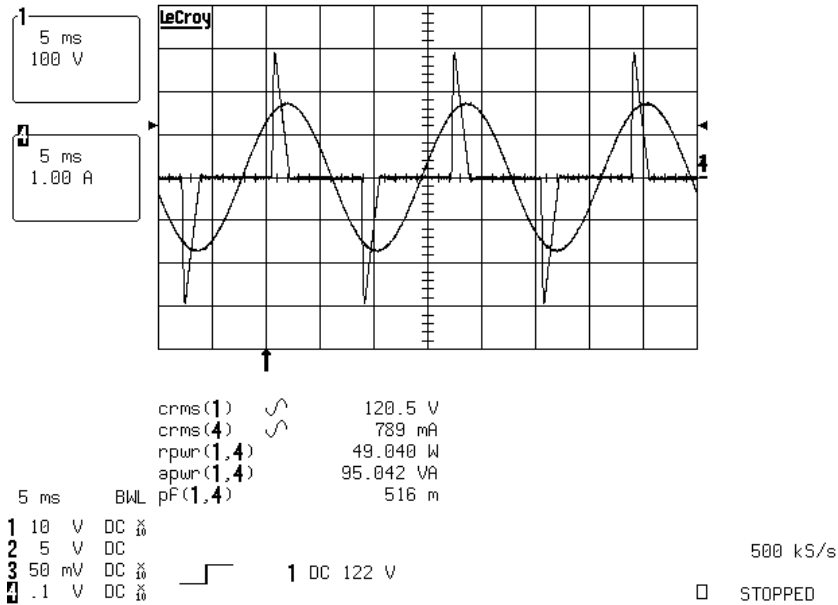
PMP8955 Test Results

lout limit	lpwm (V)
0.2	open
0.19	0
0.3	0.5
0.53	1
0.86	2
1.16	3
1.54	4
1.78	5
2.1	6



4 Input line at full load

13-Jun-13
13:08:56



5 Thermal image

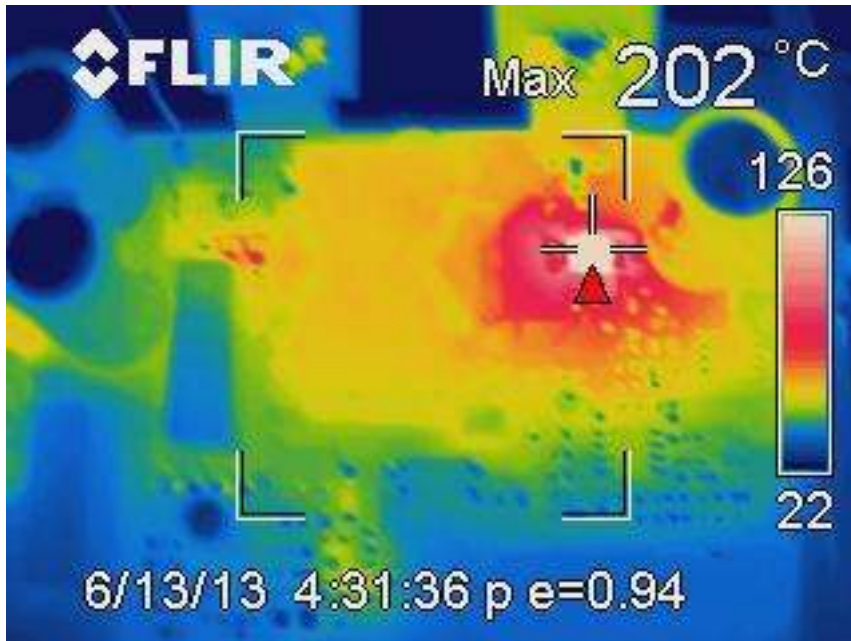
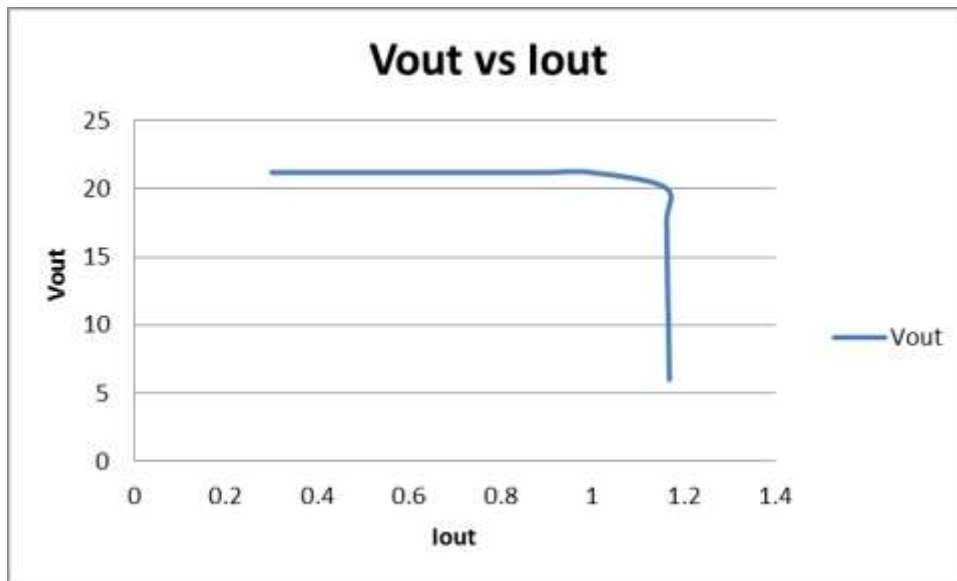


Image taken at full load in still air at 24 deg C. the hottest part on the board is the load current sense R at 202 deg C. **Customer should consider a smaller value to reduce this power dissipation ($2^2 \cdot 24 = .96$ watts)**

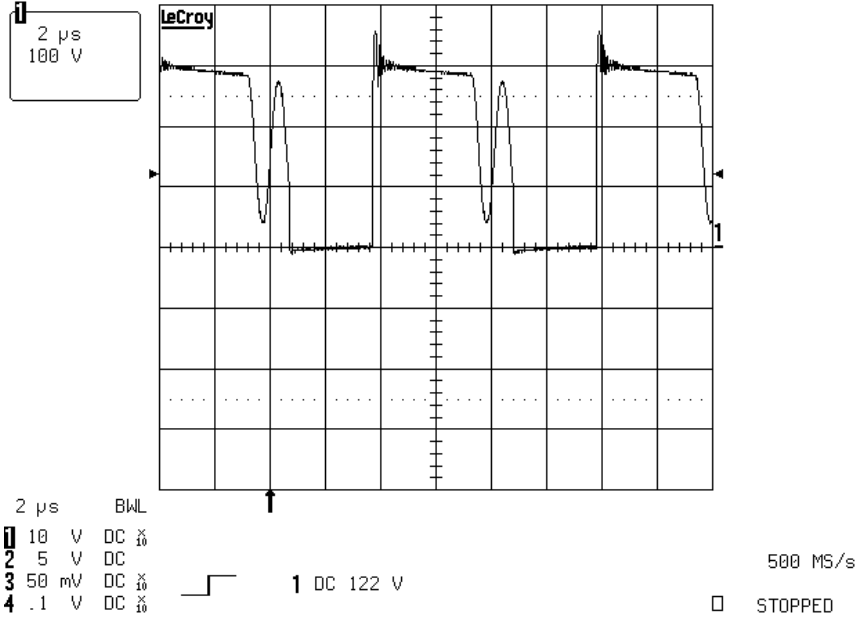
6 Output characteristics



V vs I for an output current limit selected at about 1 amp

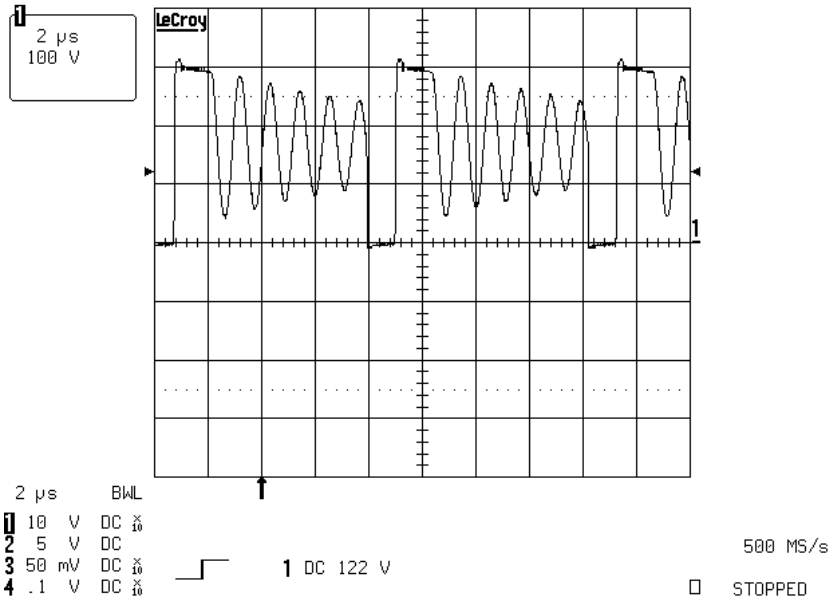
7 Drain wave forms

12-Jun-13
16:59:25



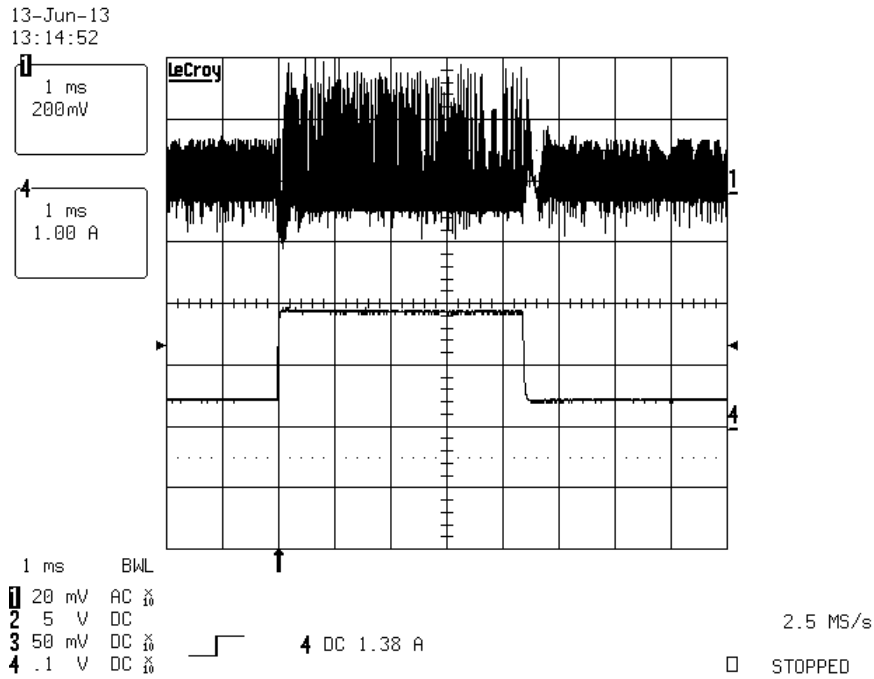
At full load

13-Jun-13 Reading Floppy Disk Drive
13:05:14



At 4 watt load

8 Constant voltage mode load step response



The lower is a .5 to 2 amp current load step and the upper is the voltage output response

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