芯茂微电子
CHIP HOPE MICRO-ELECTRONICS

BASIC ELECTRICAL CONTRAST TESTS

PD30W（LP8773+LP35116P)测试报告

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TEST BY:LGH　　CHECKED BY :　　APPROVED BY :

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ESTIMATE TEST SHEET

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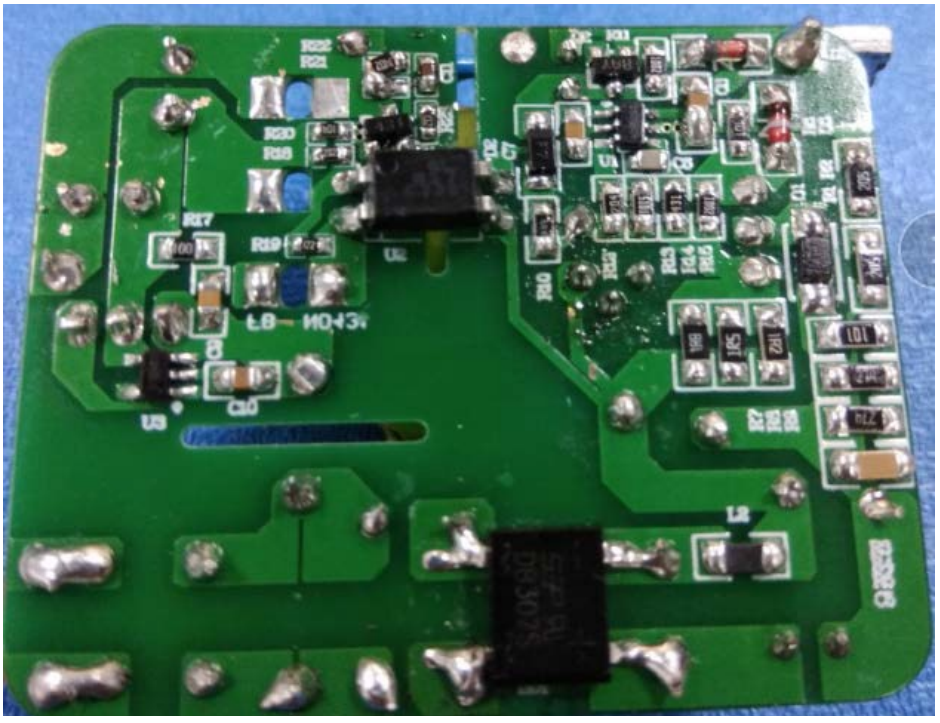
PCB A



PCB B

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1-1. Regulation，Efficiency Measurement

*Note：output voltage is measured at end of Output Line

4V3A

PD30W LP8773+LP35116P 4V-3A 板端效率							
Vin (Vac)	Pin (W)	Vout (V)	Iout (A)	Pout (W)	η (%)	OCP (A)	Average η (%)
90V	0.023	4.01	0.000	0.000		4.80	87.56
	1.404	4.03	0.300	1.209	86.11		
	3.454	4.03	0.750	3.023	87.51		
	6.838	4.03	1.500	6.045	88.40		
	10.361	4.03	2.250	9.068	87.52		
	13.925	4.03	3.000	12.090	86.82		
115V	0.040	4.01	0.000	0.000	0.00	4.80	87.95
	1.420	4.03	0.300	1.209	85.14		
	3.480	4.04	0.750	3.030	87.07		
	6.830	4.04	1.500	6.060	88.73		
	10.253	4.04	2.250	9.090	88.66		
	13.874	4.04	3.000	12.120	87.36		
230V	0.071	4.01	0.000	0.000	0.00	5.20	86.39
	1.476	4.04	0.300	1.212	82.11		
	3.531	4.05	0.750	3.038	86.02		
	7.035	4.06	1.500	6.090	86.57		
	10.555	4.07	2.250	9.158	86.76		
	14.161	4.07	3.000	12.210	86.22		
264V	0.082	4.02	0.000	0.000	0.00	5.30	86.15
	1.501	4.04	0.300	1.212	80.75		
	3.558	4.05	0.750	3.038	85.37		
	7.120	4.07	1.500	6.105	85.74		
	10.573	4.07	2.250	9.158	86.61		
	14.090	4.08	3.000	12.240	86.87		

5V3A For Output Line

LP8773+LP35116 5.0V-3.0A 板端效率

Vin (Vac)	Pin (W)	Vout (V)	Iout (A)	Pout (W)	η (%)	OCP (A)	Average η (%)
90V	0.024	5.08	0.000	0.000		4.40	88.40
	1.870	5.08	0.300	1.524	81.50		
	4.300	5.08	0.750	3.810	88.60		
	8.550	5.08	1.500	7.620	89.12		
	12.920	5.08	2.250	11.430	88.47		
	17.440	5.08	3.000	15.240	87.39		
115V	0.027	5.08	0.000	0.000	0.00	4.40	88.86
	1.770	5.08	0.300	1.524	86.10		
	4.300	5.08	0.750	3.810	88.60		
	8.520	5.08	1.500	7.620	89.44		
	12.790	5.08	2.250	11.430	89.37		
	17.310	5.08	3.000	15.240	88.04		
230V	0.062	5.08	0.000	0.000	0.00	4.63	87.60
	1.830	5.08	0.300	1.524	83.28		
	4.460	5.08	0.750	3.810	85.43		
	8.650	5.08	1.500	7.620	88.09		
	12.900	5.08	2.250	11.430	88.60		
	17.260	5.08	3.000	15.240	88.30		
264V	0.099	5.08	0.000	0.000	0.00	4.82	86.29
	1.880	5.08	0.300	1.524	81.06		
	4.560	5.08	0.750	3.810	83.55		
	8.780	5.08	1.500	7.620	86.79		
	13.070	5.08	2.250	11.430	87.45		
	17.440	5.08	3.000	15.240	87.39		

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9V3A For Output Line

LP8773+LP35116 9.0V-3.0A 带诱导器测得板端效率

Vin (Vac)	Pin (W)	Vout (V)	Iout (A)	Pout (W)	η (%)	OCP (A)	Average η (%)
90V	0.140	9.08	0.000	0.000			87.77
	3.260	9.08	0.300	2.724	83.56		
	7.780	9.14	0.750	6.855	88.11		
	15.630	9.22	1.500	13.830	88.48		
	23.780	9.30	2.250	20.925	87.99		
	32.570	9.39	3.000	28.170	86.49		
115V	0.140	9.08	0.000	0.000	0.00		88.97
	3.230	9.08	0.300	2.724	84.33		
	7.750	9.14	0.750	6.855	88.45		
	15.480	9.22	1.500	13.830	89.34		
	23.400	9.31	2.250	20.948	89.52		
	31.800	9.39	3.000	28.170	88.58		
230V	0.156	9.08	0.000	0.000	0.00		88.84
	3.360	9.09	0.300	2.727	81.16		
	7.890	9.14	0.750	6.855	86.88		
	15.540	9.22	1.500	13.830	89.00		
	23.400	9.31	2.250	20.948	89.52		
	31.340	9.40	3.000	28.200	89.98		
264V	0.177	9.08	0.000	0.000	0.00		88.25
	3.370	9.09	0.300	2.727	80.92		
	7.980	9.14	0.750	6.855	85.90		
	15.670	9.23	1.500	13.845	88.35		
	23.520	9.31	2.250	20.948	89.06		
	31.440	9.40	3.000	28.200	89.69		

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12V2.5A For Output Line

LP8773+LP35116 12V-2.5A 带诱导器测试的板端效率

Vin (Vac)	Pin (W)	Vout (V)	Iout (A)	Pout (W)	η (%)	OCP (A)	Average η (%)
90V	0.208	12.05	0.000	0.000			87.54
	3.670	12.05	0.250	3.013	82.08		
	8.670	12.10	0.625	7.563	87.23		
	17.220	12.17	1.250	15.213	88.34		
	26.090	12.24	1.875	22.950	87.96		
	35.530	12.31	2.500	30.775	86.62		
115V	0.210	12.05	0.000	0.000	0.00		88.69
	3.660	12.05	0.250	3.013	82.31		
	8.640	12.10	0.625	7.563	87.53		
	17.090	12.17	1.250	15.213	89.01		
	25.670	12.24	1.875	22.950	89.40		
	34.650	12.31	2.500	30.775	88.82		
230V	0.220	12.05	0.000	0.000	0.00		88.72
	3.770	12.05	0.250	3.013	79.91		
	8.760	12.10	0.625	7.563	86.33		
	17.110	12.17	1.250	15.213	88.91		
	25.610	12.24	1.875	22.950	89.61		
	34.180	12.31	2.500	30.775	90.04		
264V	0.238	12.05	0.000	0.000	0.00		88.11
	3.840	12.05	0.250	3.013	78.45		
	8.840	12.10	0.625	7.563	85.55		
	17.250	12.17	1.250	15.213	88.19		
	25.780	12.24	1.875	22.950	89.02		
	34.340	12.32	2.500	30.800	89.69		

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15V2A For Output Line:

LP8773+LP35116 15V-2.0A 带诱导器测的板端效率

Vin (Vac)	Pin (W)	Vout (V)	Iout (A)	Pout (W)	η (%)	OCP (A)	Average η (%)
90V	0.320	14.99	0.000	0.000			86.83
	3.850	14.98	0.200	2.996	77.82		
	8.780	15.01	0.500	7.505	85.48		
	17.270	15.07	1.000	15.070	87.26		
	25.870	15.12	1.500	22.680	87.67		
	34.940	15.18	2.000	30.360	86.89		
115V	0.312	14.99	0.000	0.000	0.00		87.92
	3.830	14.98	0.200	2.996	78.22		
	8.730	15.01	0.500	7.505	85.97		
	17.120	15.07	1.000	15.070	88.03		
	25.510	15.12	1.500	22.680	88.91		
	34.190	15.18	2.000	30.360	88.80		
230V	0.320	14.99	0.000	0.000	0.00		87.82
	3.871	14.98	0.200	2.996	77.40		
	8.852	15.01	0.500	7.505	84.78		
	17.151	15.07	1.000	15.070	87.87		
	25.510	15.12	1.500	22.680	88.91		
	33.830	15.18	2.000	30.360	89.74		
264V	0.331	14.99	0.000	0.000	0.00		87.42
	3.916	14.98	0.200	2.996	76.51		
	8.930	15.01	0.500	7.505	84.04		
	17.186	15.07	1.000	15.070	87.69		
	25.630	15.12	1.500	22.680	88.49		
	33.930	15.18	2.000	30.360	89.48		

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20V1.5A For Output Line

LP8773+LP35116 20V-1.5A 带诱导器测试的板端效率

Vin (Vac)	Pin (W)	Vout (V)	Iout (A)	Pout (W)	η (%)	OCP (A)	Average η (%)
90V	0.622	19.86	0.000	0.000			84.71
	4.172	19.86	0.150	2.979	71.40		
	9.160	19.88	0.375	7.455	81.39		
	17.490	19.92	0.750	14.940	85.42		
	26.110	19.96	1.125	22.455	86.00		
	34.870	20.00	1.500	30.000	86.03		
115V	0.602	19.86	0.000	0.000	0.00		85.94
	4.160	19.86	0.150	2.979	71.61		
	9.030	19.88	0.375	7.455	82.56		
	17.320	19.92	0.750	14.940	86.26		
	25.730	19.97	1.125	22.466	87.32		
	34.230	20.00	1.500	30.000	87.64		
230V	0.542	19.86	0.000	0.000	0.00		86.05
	4.240	19.86	0.150	2.979	70.26		
	9.094	19.88	0.375	7.455	81.98		
	17.371	19.92	0.750	14.940	86.01		
	25.670	19.97	1.125	22.466	87.52		
	33.820	20.00	1.500	30.000	88.70		
264V	0.556	19.86	0.000	0.000	0.00		85.61
	4.286	19.86	0.150	2.979	69.51		
	9.172	19.88	0.375	7.455	81.28		
	17.469	19.92	0.750	14.940	85.52		
	25.780	19.97	1.125	22.466	87.15		
	33.925	20.01	1.500	30.015	88.47		

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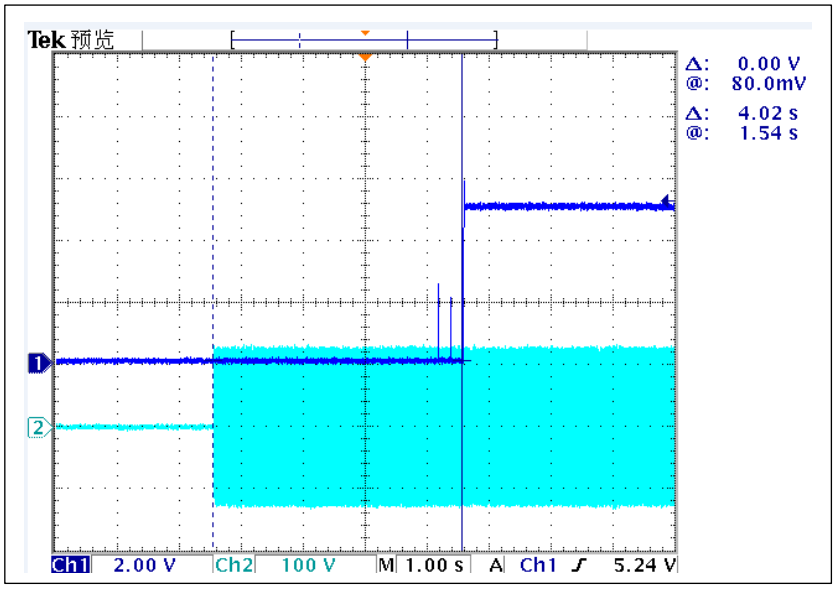
2-1.Turn-on Delay Time AND Hold Up Time

2-1. TEST CONDITION:

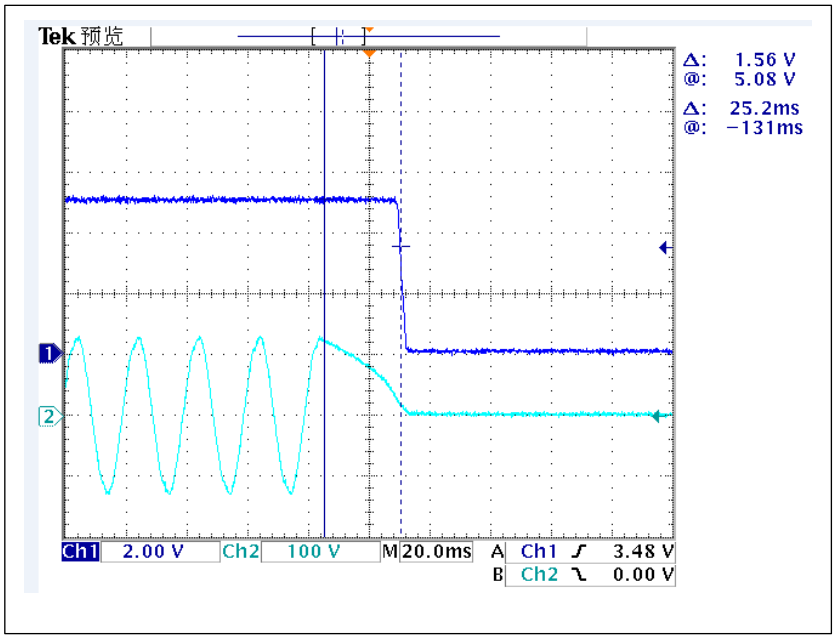
1..AC Input:90V/60Hz

2.Output Load: 5V3A

3..Ta: 25℃



90Vac， 5V3A Tst_delay:4.02 S



90Vac，Full Load Hold Up Time：25.2 mS

2-2.Vds Waveform

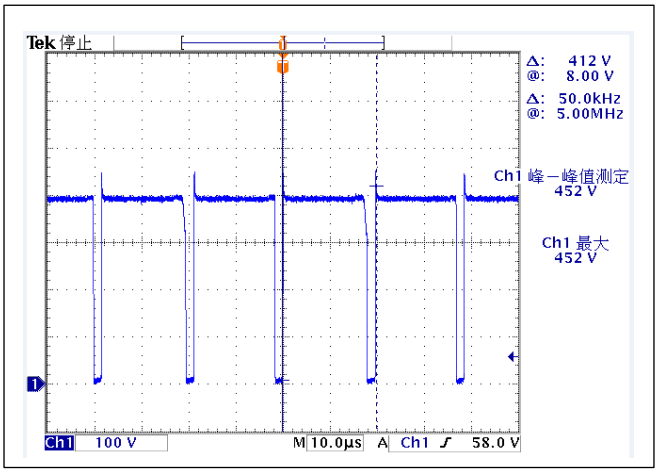
2-2. TEST CONDITION:

1..AC Input:264V/50Hz

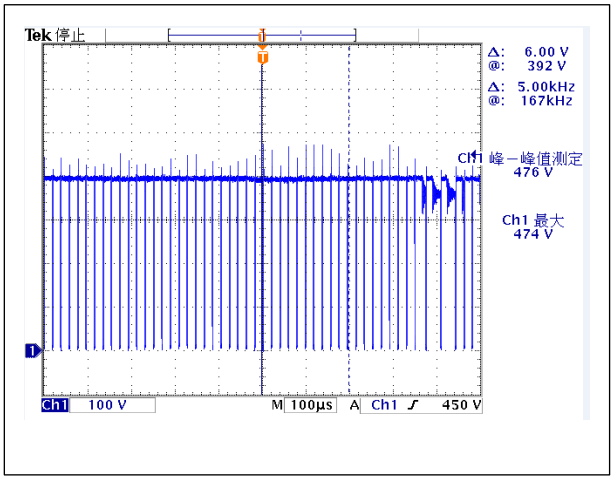
2.Output Load: 5V 3A、9V3A 、12V2.5A、15V2A、20V1.5A

3..Ta: 25℃

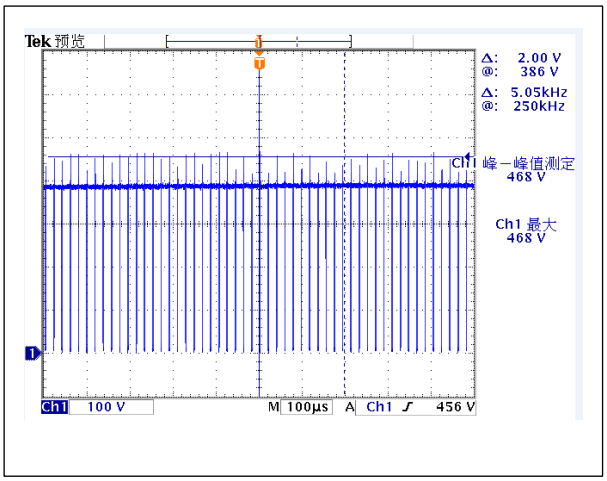
5V3A



264Vac，Full Load Vds(max)：452V　　工作频率：50.0　KHZ

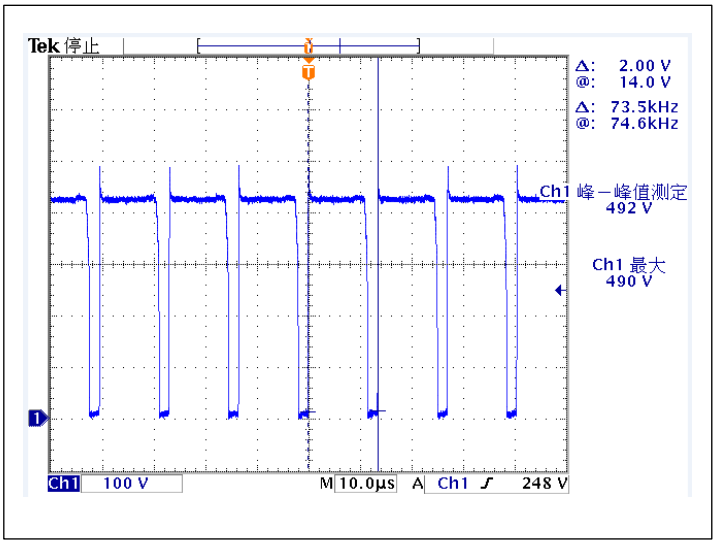


Short output Vds(max)：476V



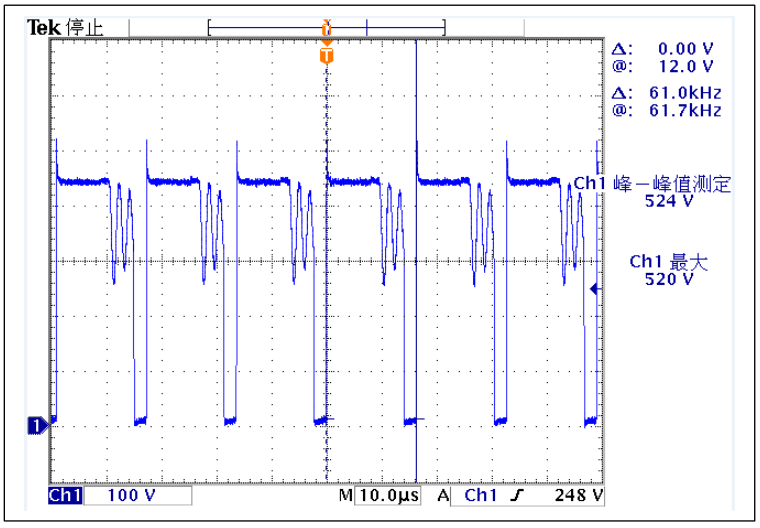
OCP Vds(max)：468V

9V3A



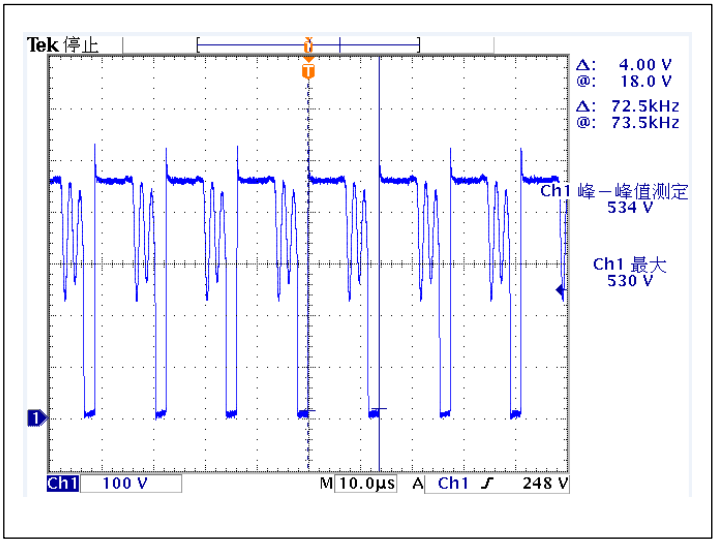
264Vac，Full Load Vds(max): 492V　工作频率: 73.5 KHZ

12V2.5A



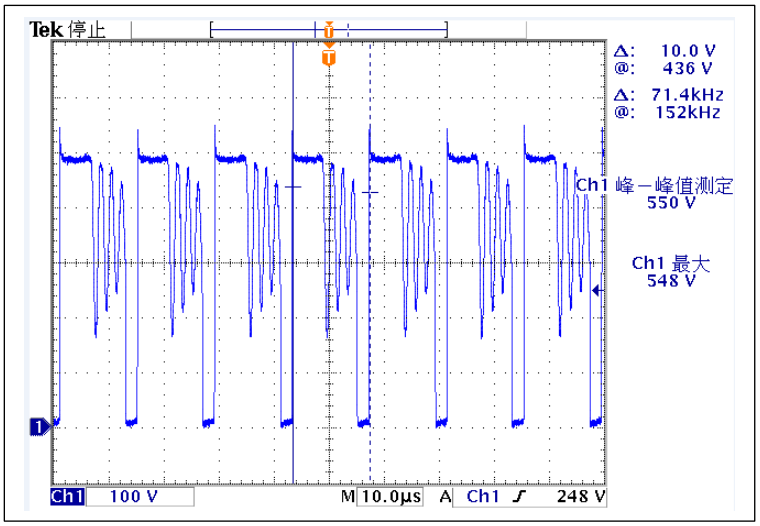
264Vac，Full Load Vds(max): 524V　工作频率: 61KHZ

15V2A



264Vac，Full Load Vds(max): 534V　工作频率: 72.5 KHZ

20V1.5A



264Vac，Full Load Vds(max): 550V　工作频率: 71.4KHZ

3.Ripple AND Noise

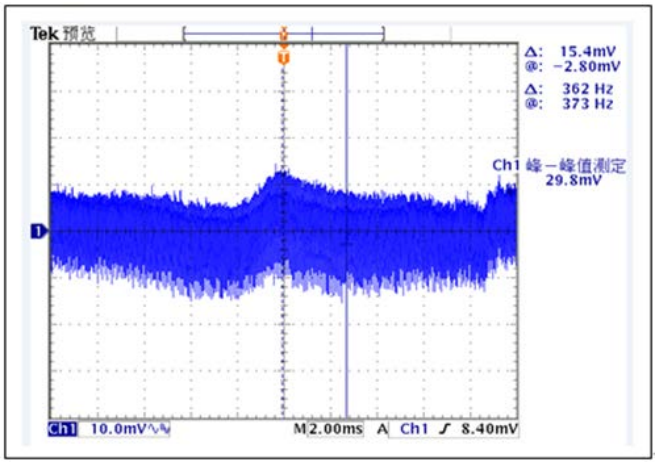
2-3.1 TEST CONDITION:

1..AC Input:90V/60Hz - 264V/50Hz

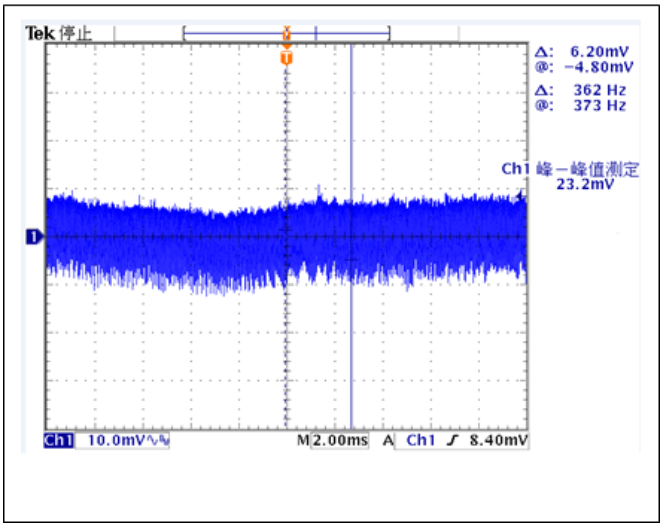
2.Output Load:5V 3A、9V3A 、12V2.5A、15V2A、20V1.5A

3.Ta: 25℃

5V3A

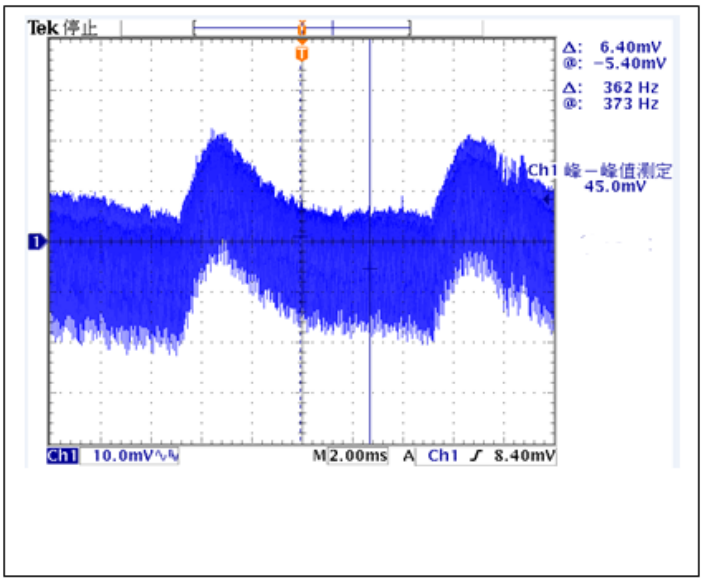


90Vac Full Load Ripple: 29.8mv

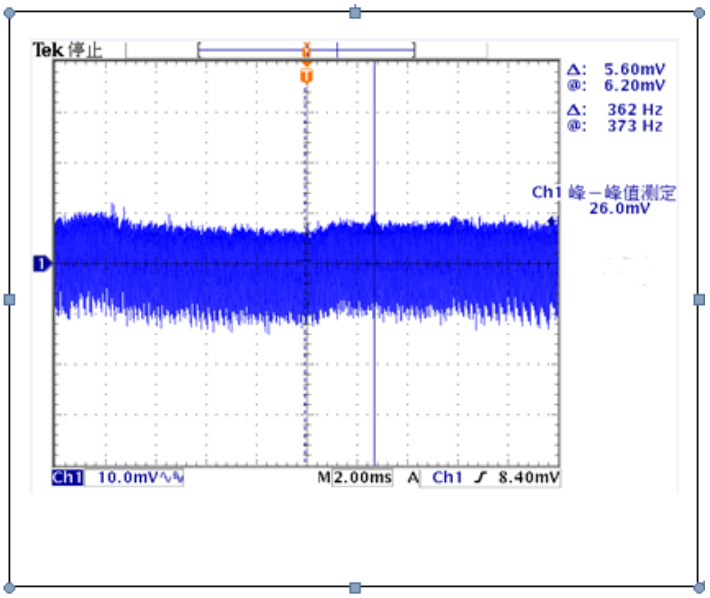


264Vac Full Load Ripple: 23.2mv

9V3A

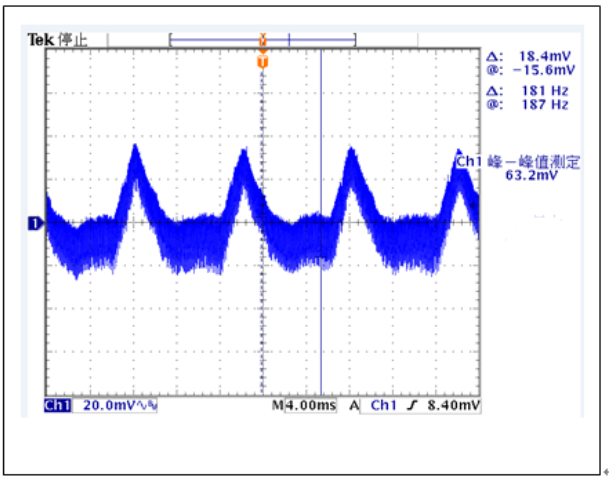


90Vac Full Load Ripple:45mv

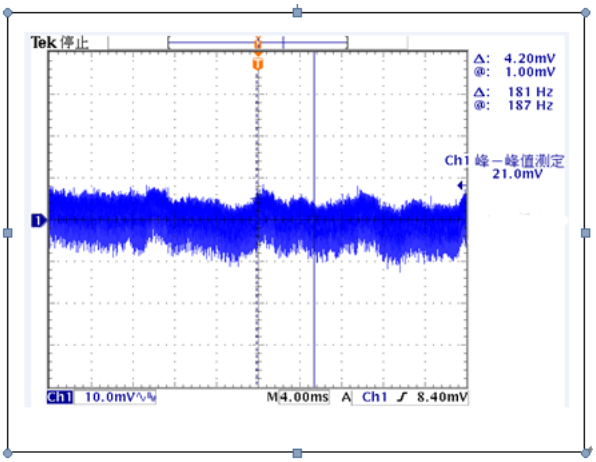


264Vac Full Load Ripple:26mv

12V2.5A

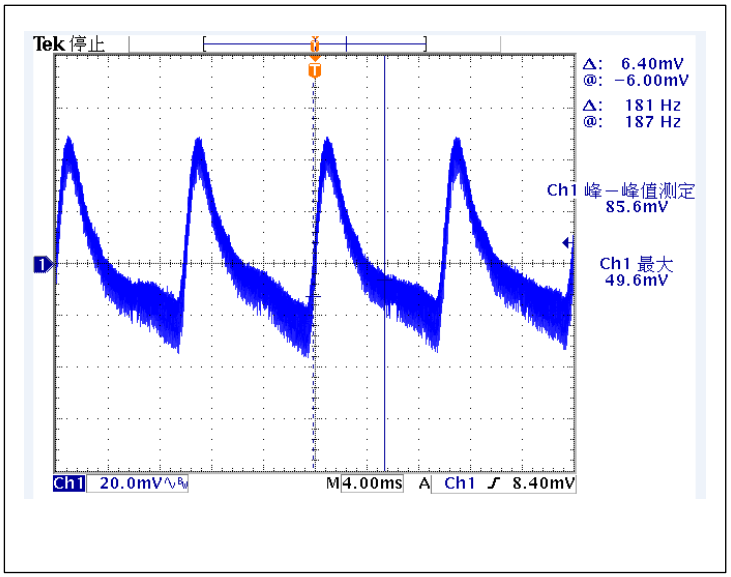


90Vac Full Load Ripple;63.2mv

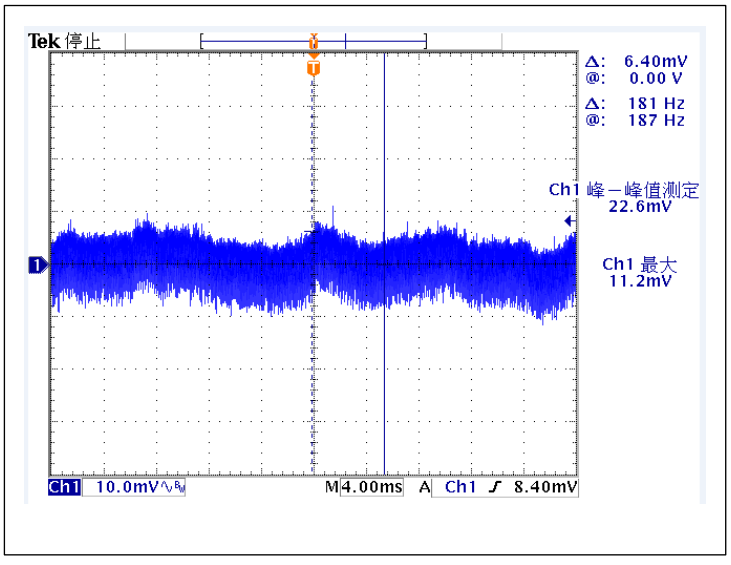


264Vac Full Load Ripple; 21mv

15V2A

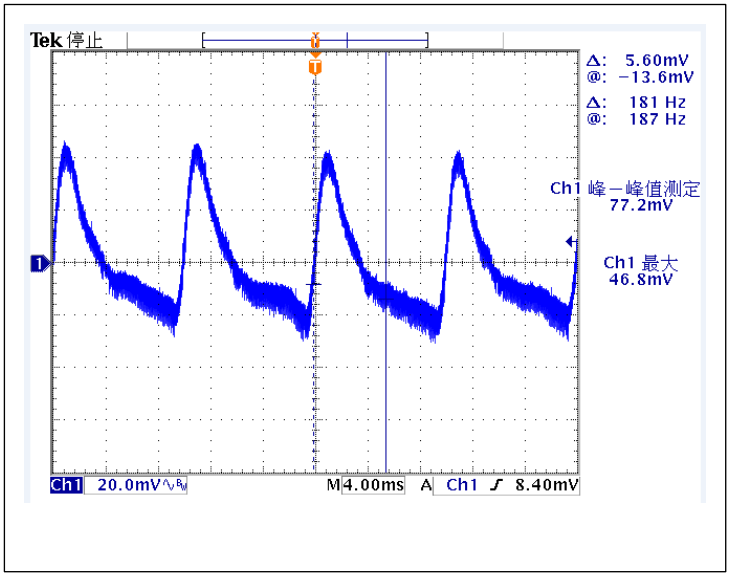


90Vac Full Load Ripple:85.6mv

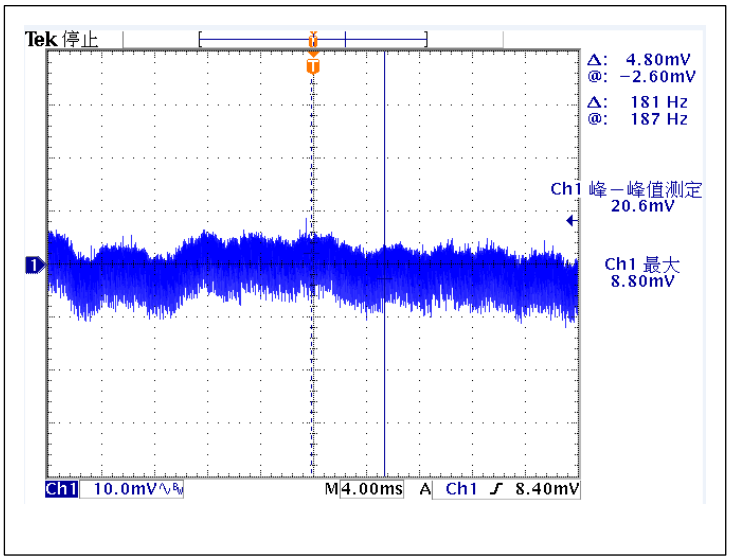


264Vac Full Load Ripple: 22.6mv

20V1.5A



90Vac Full Load Ripple:77.2mv



264Vac Full Load Ripple: 20.6mv

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2-4.Output VDS

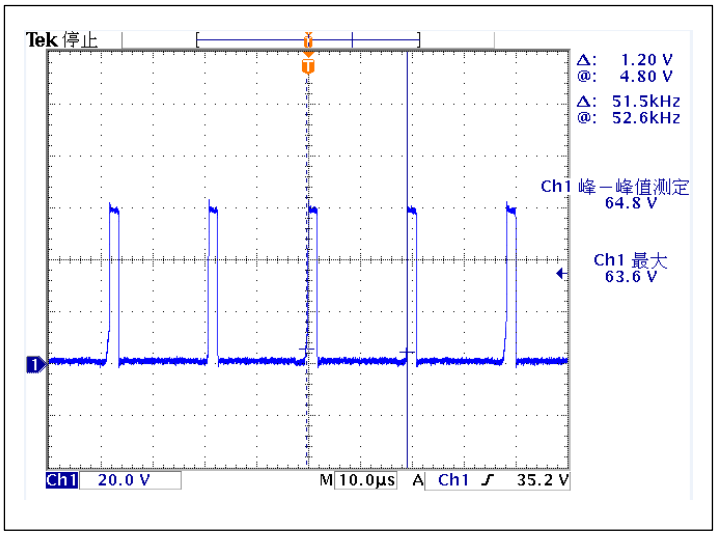
2-4. TEST CONDITION:

1..AC Input:264V/50Hz

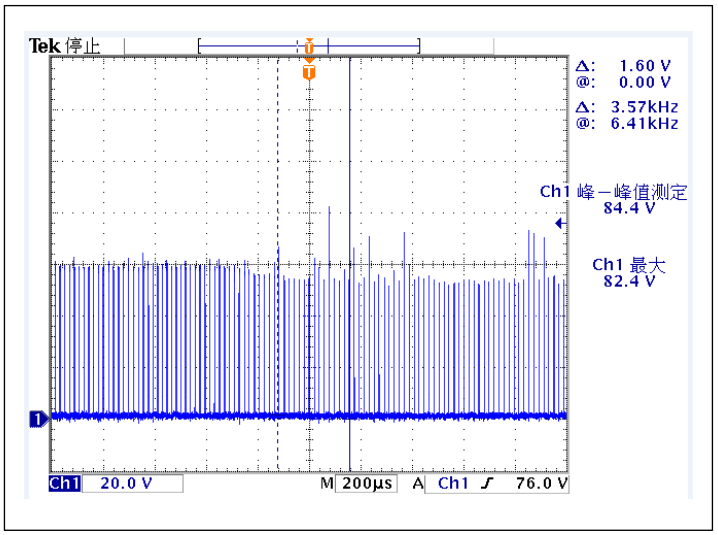
2..Output Load: 5V 3A、9V3A 、12V2.5A、15V2A、20V1.5A

3..Ta: 25℃

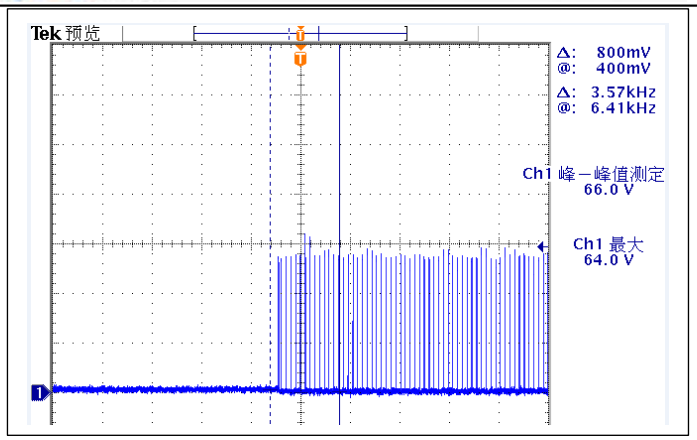
5V3A



264Vac，Full Load Vpk-pk:64.8V 工作频率：51.5K HZ

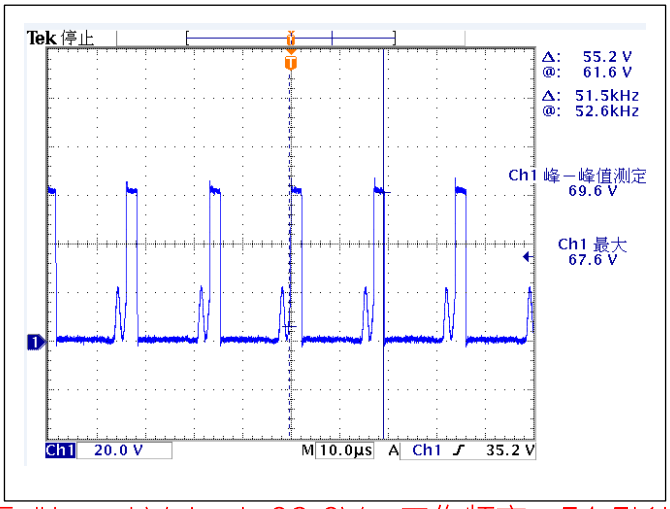


264Vac Short output Vpk-pk84.4V



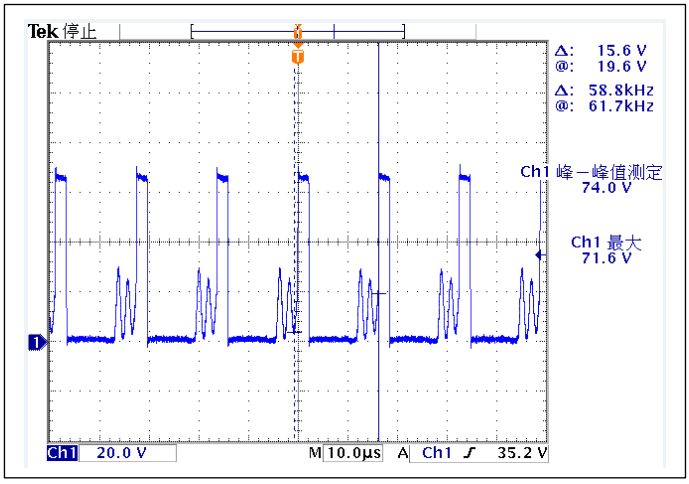
264Vac　OCP Vpk-pk;66.0V

9V3A



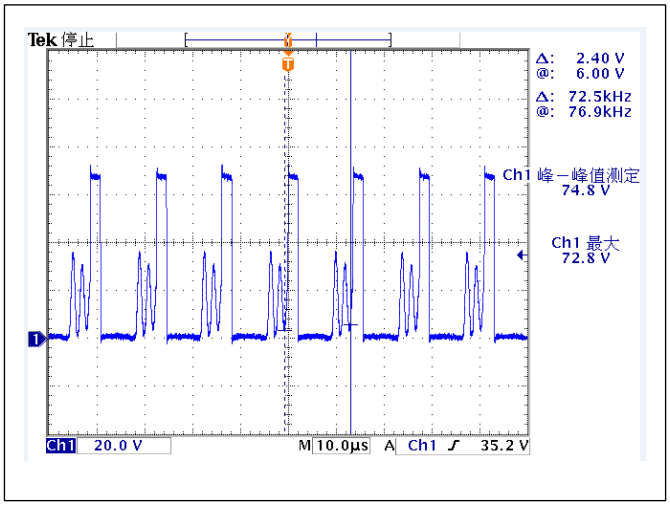
264Vac，Full Load Vpk-pk;69.6V　工作频率：51.5K HZ

12V2.5A



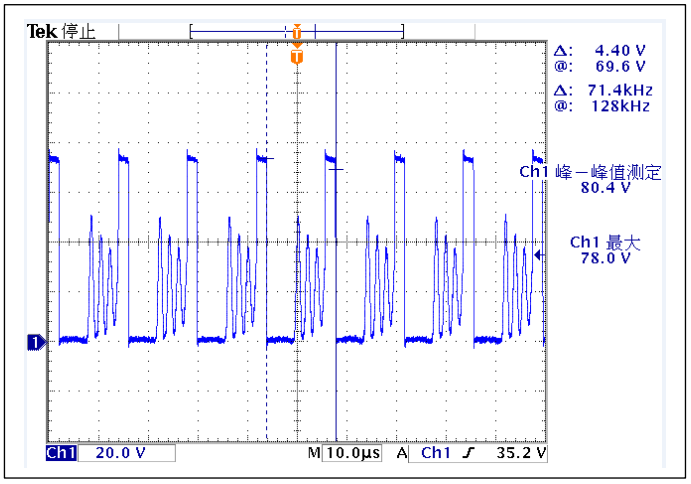
264Vac，Full Load Vpk-pk;74V　工作频率：58.8K HZ

15V2A



264Vac，Full Load Vpk-pk;74.8V　工作频率：72.5K HZ

20V1.5A



264Vac，Full Load Vpk-pk;80.4V　工作频率：71.4K HZ

2-5. Transformer Flux Density

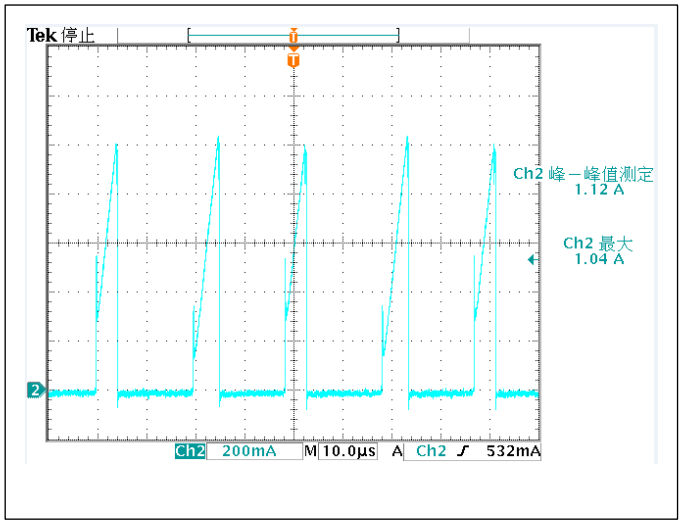
2-5. TEST CONDITION:

1..AC Input:90V/60Hz - 264V/50HZ

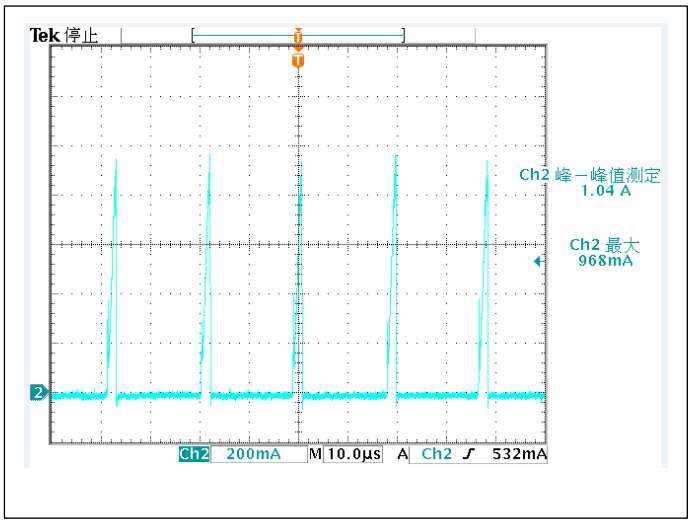
2..Output Load: 5V 3A、

3..Ta: 25℃

5V3A



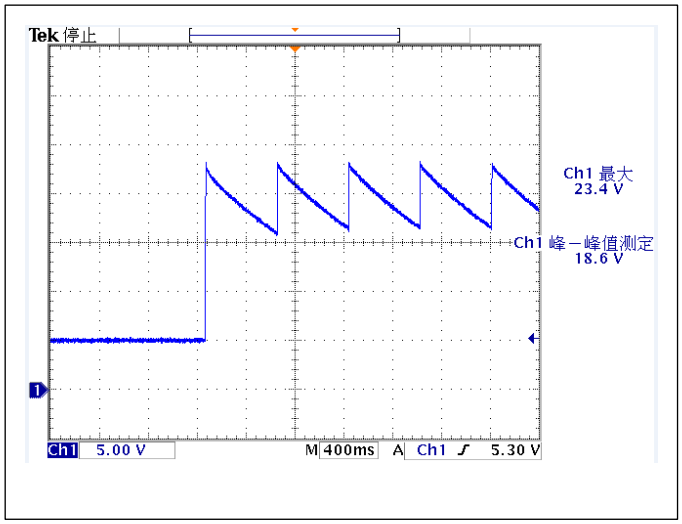
90Vac Ids max：1.12A



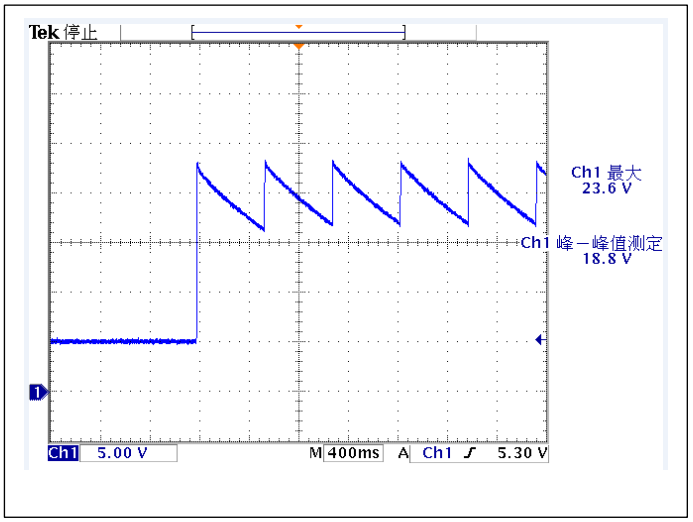
264Vac Ids max：1.04A

2-6.Over-Voltage Protection

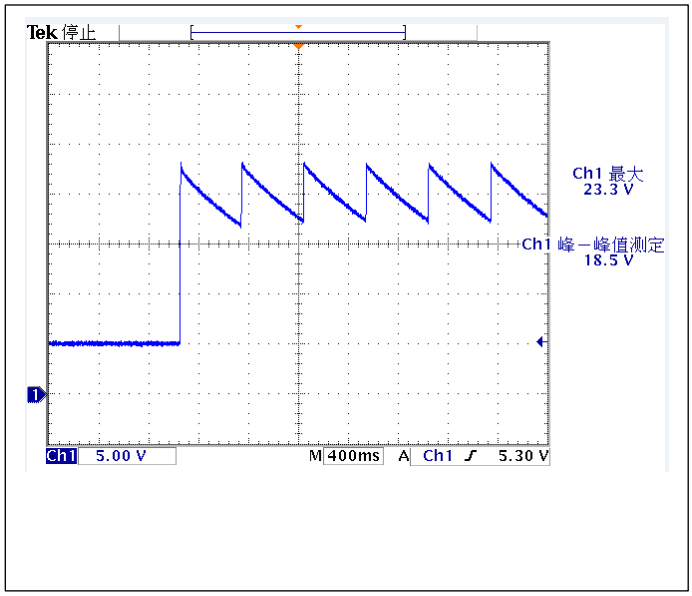
2-6. TEST CONDITION:
1..AC Input:90V/60Hz 264V/50Hz
2..Output Load:5V/0A
3..Ta: 25℃



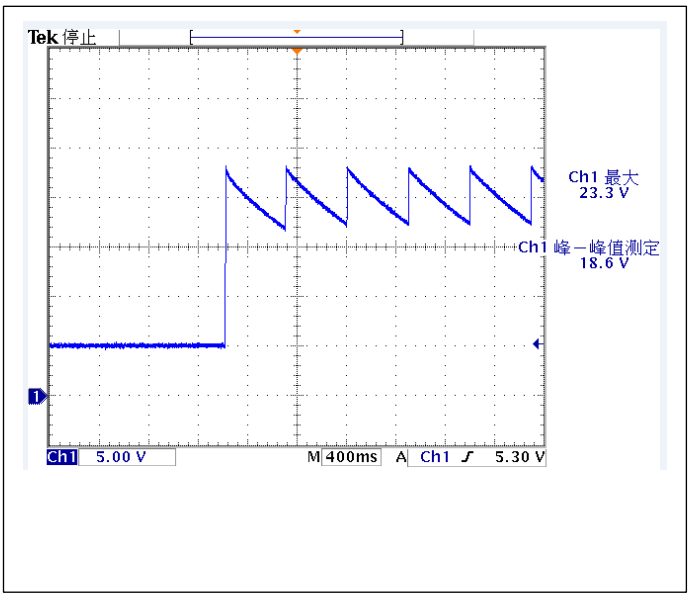
90Vac OVP Vo _pk : 23.4V



115Vac OVP Vo _pk : 23.6V



230Vac OVP Vo _pk : 23.3V



264Vac OVP Vo _pk : 23.3V

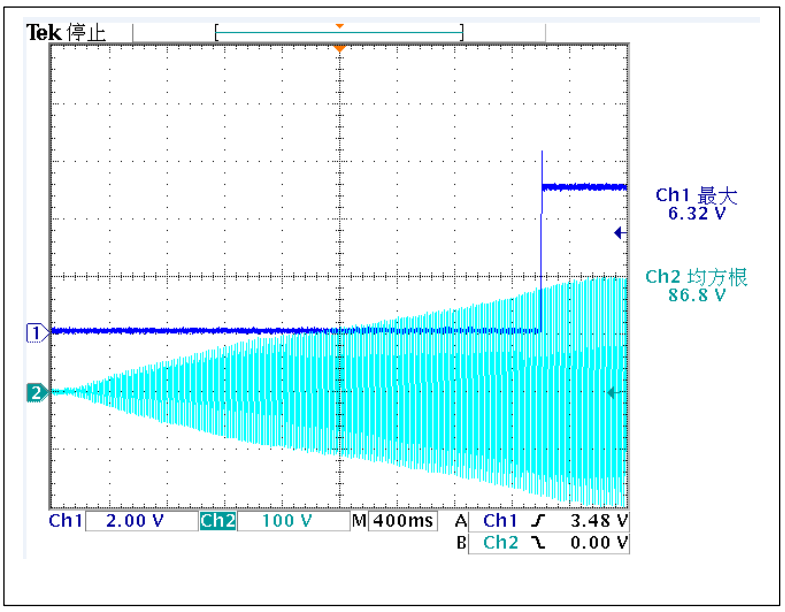
2-7.AC Startup Voltage Characteristic

2-7. TEST CONDITION:

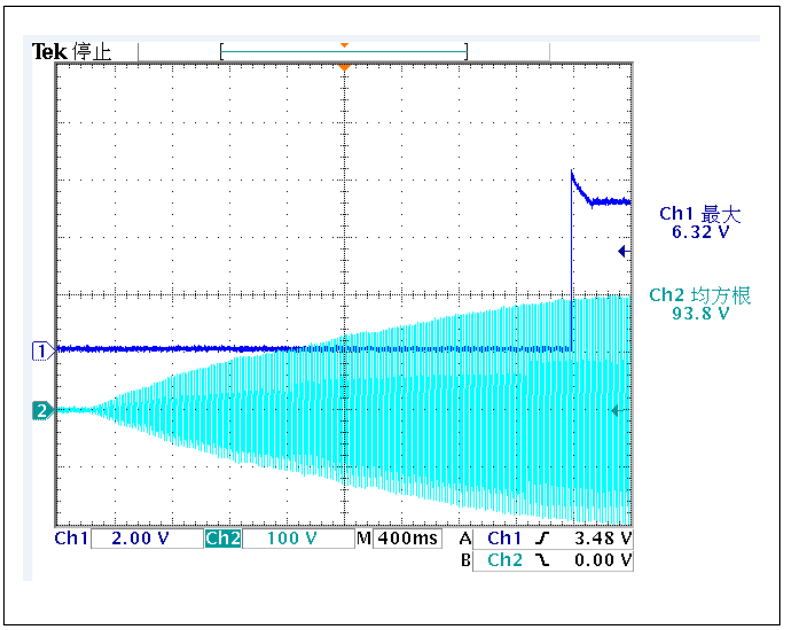
1..AC Input:

2..Output

Load:5V/3A 5V0A



5V3A Vin Turn up; 86.8V



No Load Vin Turn up; 93.8V

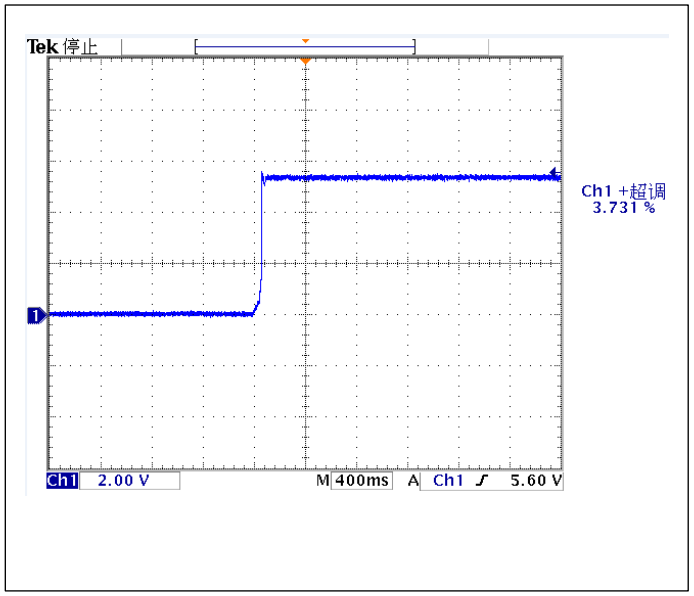
2-8. Overshoot

2-8. TEST RADIATION:

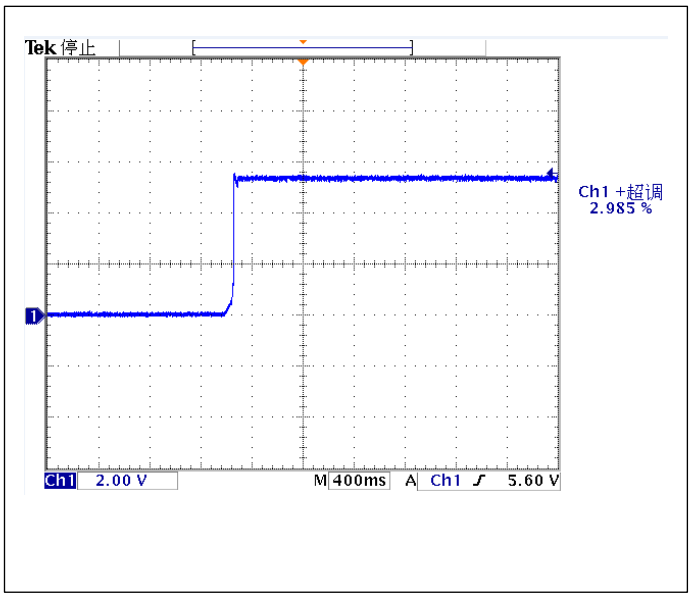
1..AC Input:90V/60Hz 110V/60Hz 220V/50HZ 264V/50Hz

2..Output Load:5V/0A,≤10%;

3..Ta: 25℃

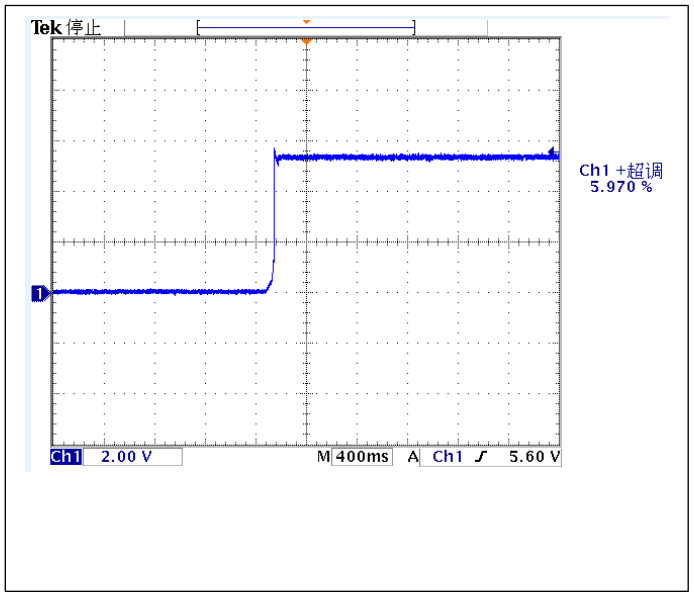


90V;3.731%

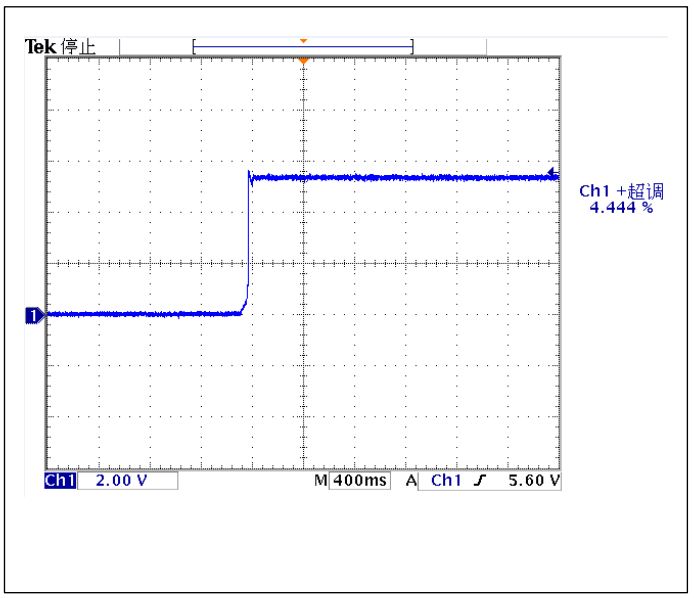


115V;2.985%

115V



230V; 5.970%

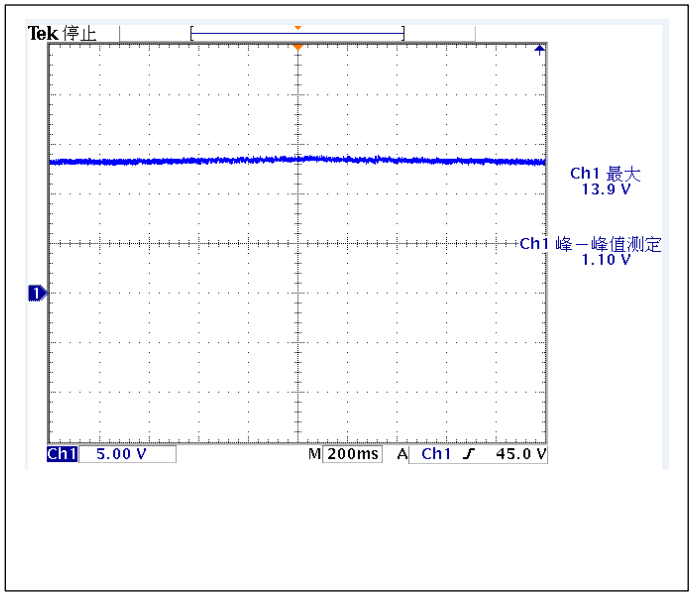


264V;4.444%

2-9. Vcc Range

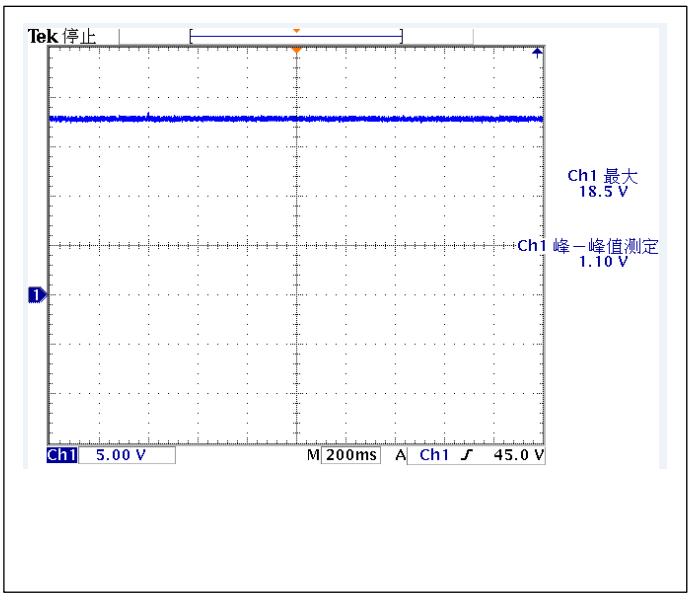
5V

Vin=90Vac/60HZ, No Load



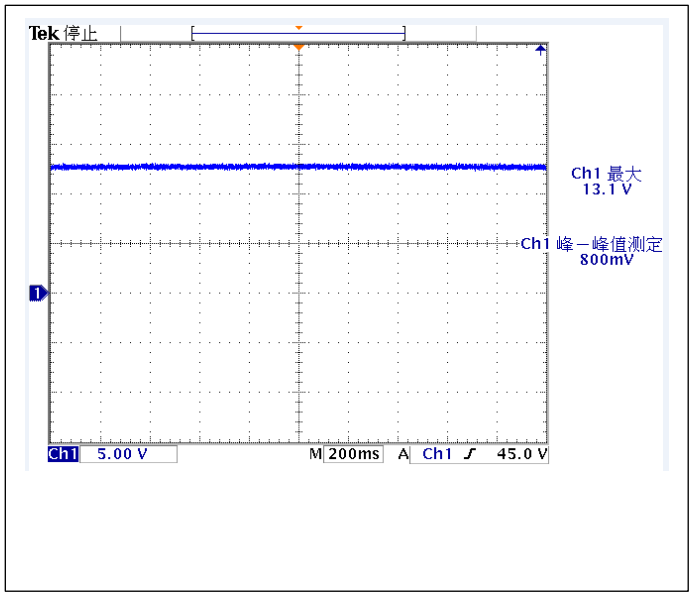
Vcc Min= 13.9V

Vin=90Vac/60HZ, Full Load



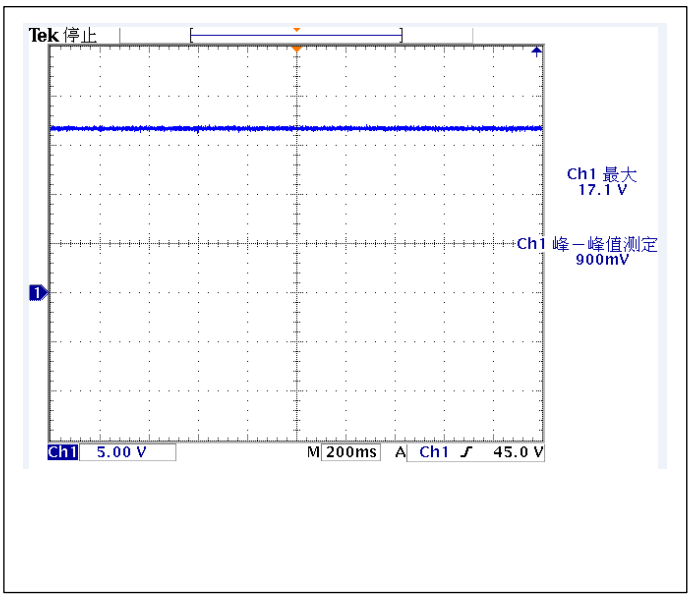
Vcc Max= 18.5V

Vin=264Vac/50HZ, No Load



Vcc Min= 13.1V

Vin=264Vac/50HZ, Full Load



Vcc Max= 17.1V

3.Thermal Test for Critical Component

3-1. TEST CONDITION:

1..AC Input:90V/60Hz 264V/50HZ

2..Output Load:5V3A 20V1.5A

3..Ta: 40℃

4..Shell Ta: ℃

5V3A

Item	环境温度(40℃) PD30W 5V3A			
	Vin=90Vac	Vin=115Vac	Vin=230Vac	Vin=264Vac
	温度(℃)	温度(℃)	温度(℃)	温度(℃)
7N65	103.4	99.4	97.1	98.6
NCP0178A	93.3	93.8	96.3	94.2
线包	103.2	101.3	99.3	103.6
磁芯	101.5	98.5	97.6	102.4

20V1.5A

Item	环境温度(40℃) PD30W 20V1.5A			
	Vin=90Vac	Vin=115Vac	Vin=230Vac	Vin=264Vac
	温度(℃)	温度(℃)	温度(℃)	温度(℃)
7N65	112.6	109.2	106.7	104.6
NCP0178A	95.5	93.8	96.3	98.2
线包	105.3	102.2	101.5	107.2
磁芯	102.5	100.2	99.1	103.4

4.EMI TEST REPORT

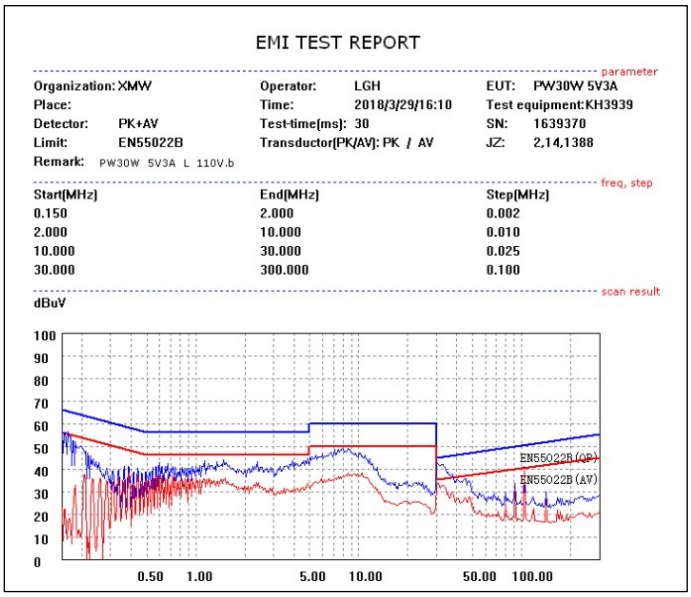
4-1.1 TEST CONDITION:

1..AC Input:110V/60Hz 220V/50HZ

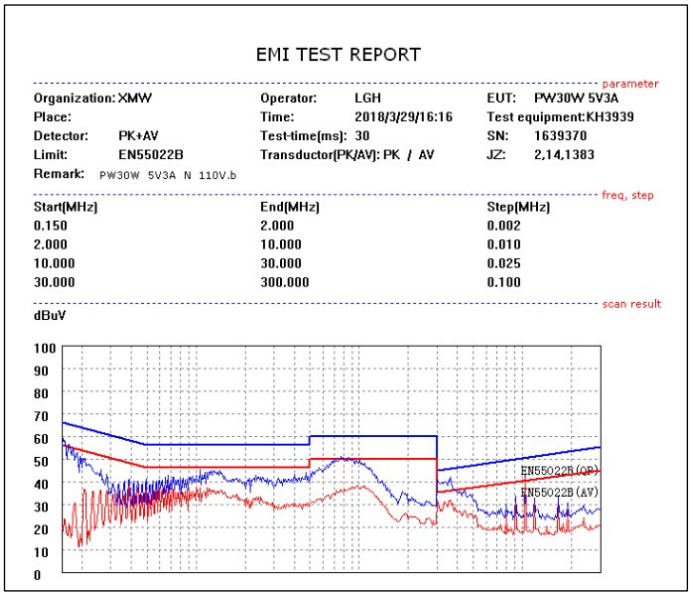
2..Output Load:5V3A 9V3A 12V2.5A 15V2A 20V1.5A

3..Ta: 25℃

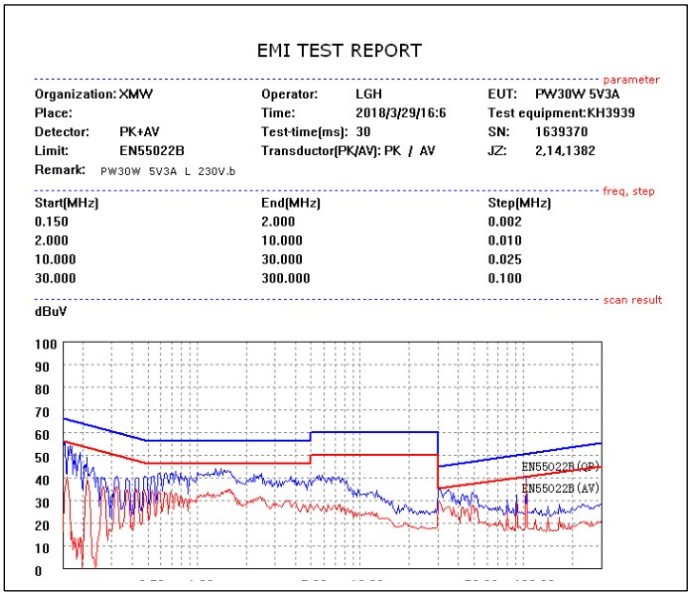
5V3A



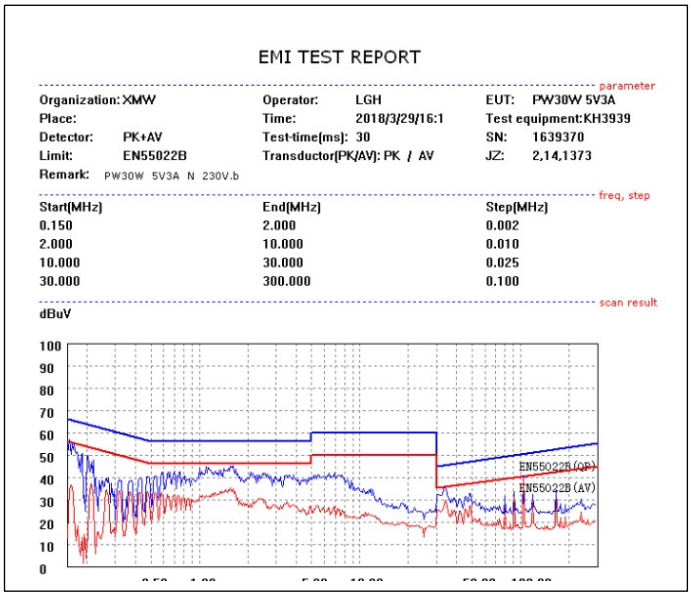
110V L



110V N



230V L



230V N

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9V3A

EMI TEST REPORT

parameter

Organization: XMW	Operator: LGH	EUT: PW30W 9V3A
Place:	Time: 2018/3/29/15:51	Test equipment:KH3939
Detector: PK+AV	Test-time(ms): 30	SN: 1639370
Limit: EN55022B	Transductor[PK/AV]: PK / AV	JZ: 2,14,1374
Remark: PW30W 9V3A L 230V.b		

freq, step

Start(MHz)	End(MHz)	Step(MHz)
0.150	2.000	0.002
2.000	10.000	0.010
10.000	30.000	0.025
30.000	300.000	0.100

scan result

dBuV

230V L

EMI TEST REPORT

parameter

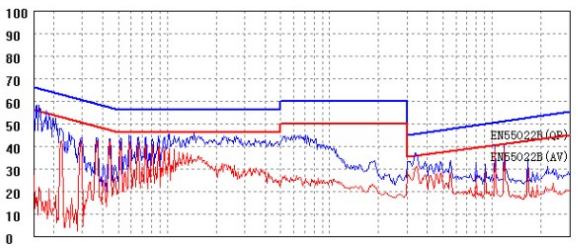
Organization: XMW	Operator: LGH	EUT: PW30W 9V3A
Place:	Time: 2018/3/29/15:56	Test equipment:KH3939
Detector: PK+AV	Test-time(ms): 30	SN: 1639370
Limit: EN55022B	Transductor[PK/AV]: PK / AV	JZ: 2,14,1393
Remark: PW30W 9V3A N 230V.b		

freq, step

Start(MHz)	End(MHz)	Step(MHz)
0.150	2.000	0.002
2.000	10.000	0.010
10.000	30.000	0.025
30.000	300.000	0.100

scan result

dBuV



230V N

12V2.5A

EMI TEST REPORT

parameter

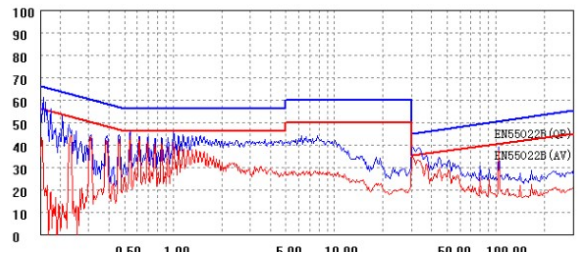
Organization: XMW	Operator: LGH	EUT: PW30W 12V2.5A
Place:	Time: 2018/3/29/15:40	Test equipment:KH3939
Detector: PK+AV	Test-time(ms): 30	SN: 1639370
Limit: EN55022B	Transductor[PK/AV]: PK / AV	JZ: 2,14,1374
Remark: PW30W 12V2.5A L 230V		

freq, step

Start(MHz)	End(MHz)	Step(MHz)
0.150	2.000	0.002
2.000	10.000	0.010
10.000	30.000	0.025
30.000	300.000	0.100

scan result

dBuV



230V L

EMI TEST REPORT

parameter

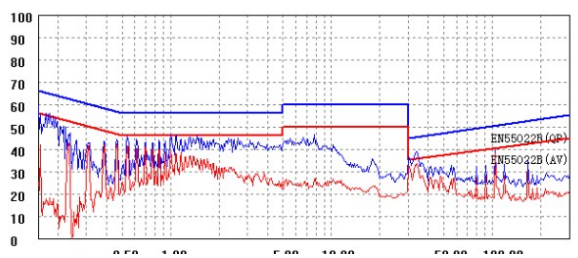
Organization: XMW	Operator: LGH	EUT: PW30W 12V2.5A
Place:	Time: 2018/3/29/15:36	Test equipment:KH3939
Detector: PK+AV	Test-time(ms): 30	SN: 1639370
Limit: EN55022B	Transductor[PK/AV]: PK / AV	JZ: 2,14,1382
Remark: PW30W 12V2.5A N 230V		

freq, step

Start(MHz)	End(MHz)	Step(MHz)
0.150	2.000	0.002
2.000	10.000	0.010
10.000	30.000	0.025
30.000	300.000	0.100

scan result

dBuV



230V N

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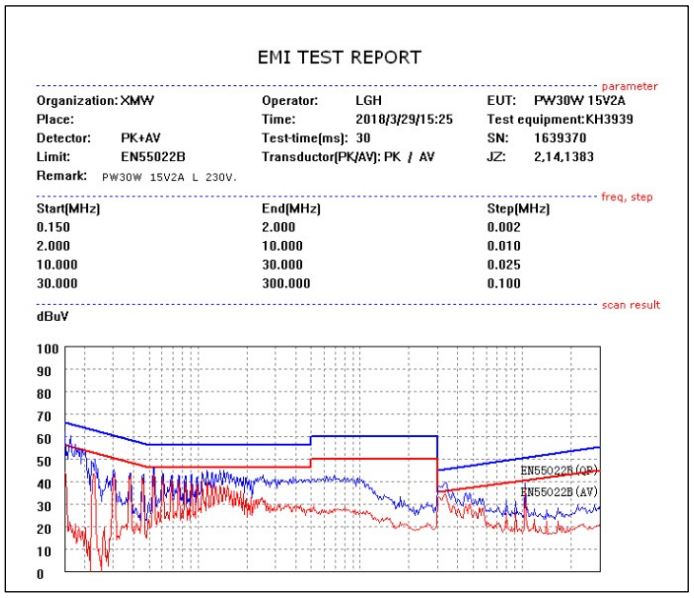
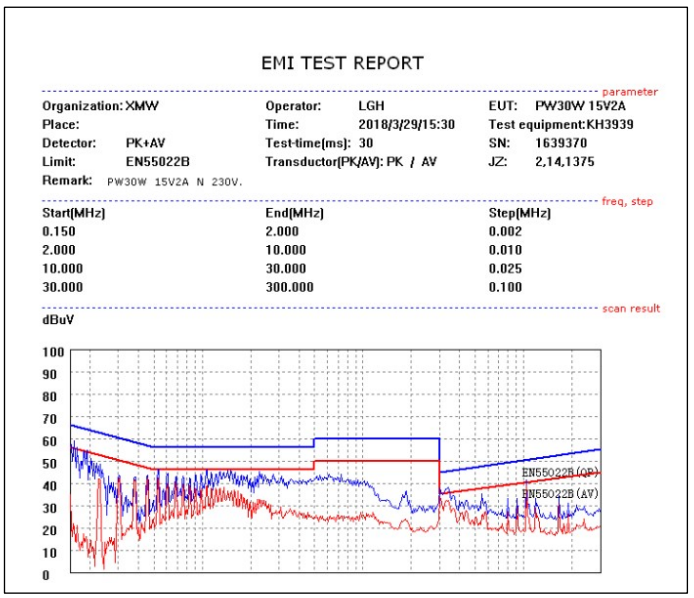
15V2A

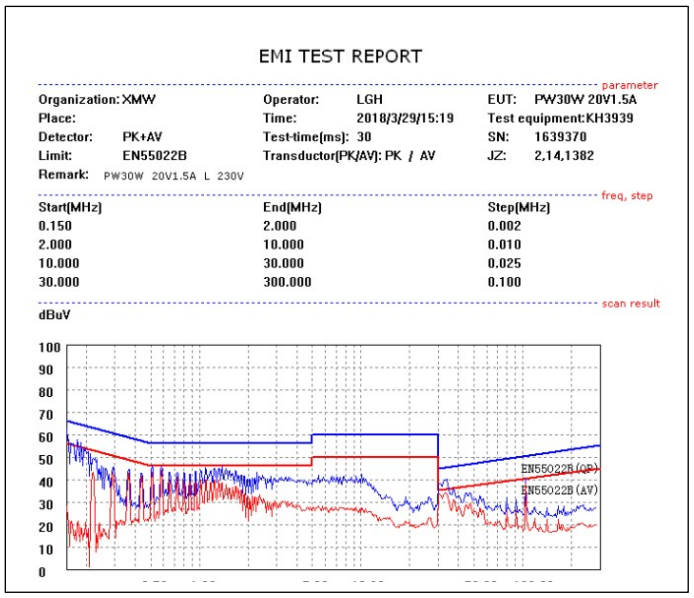


230V L

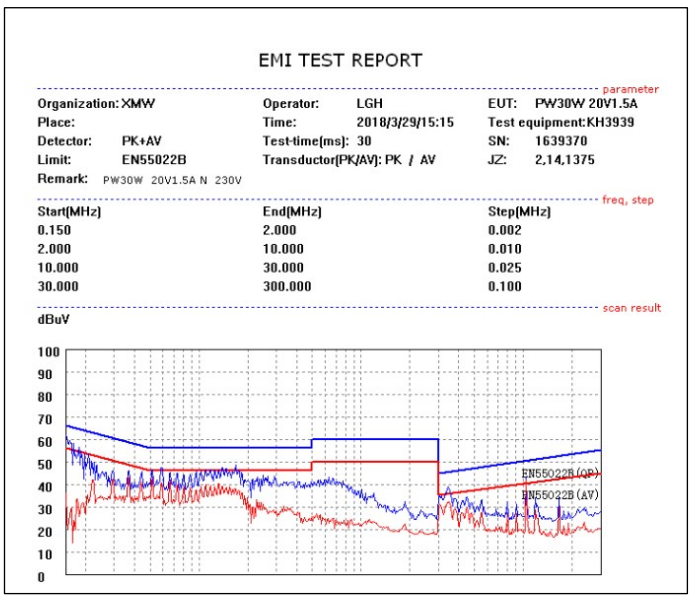


230V N

20V1.5A



230V L



230V N

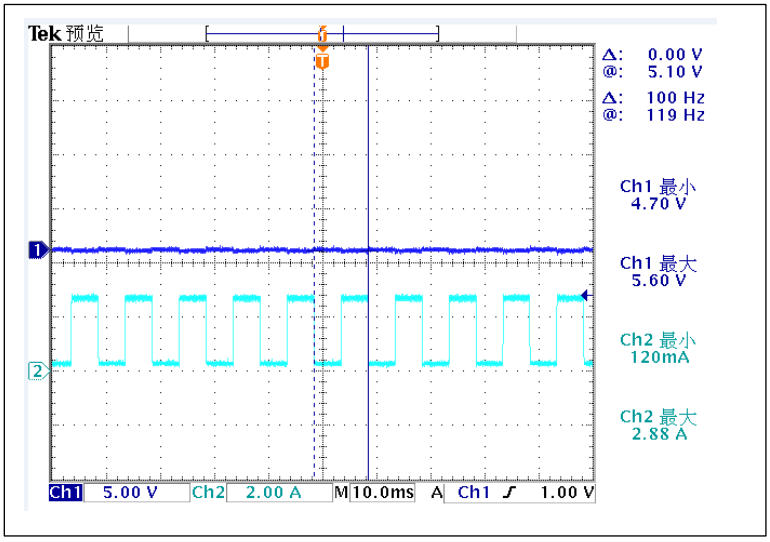
5. Output Dynamic Response Test

7-TEST CONDITION:

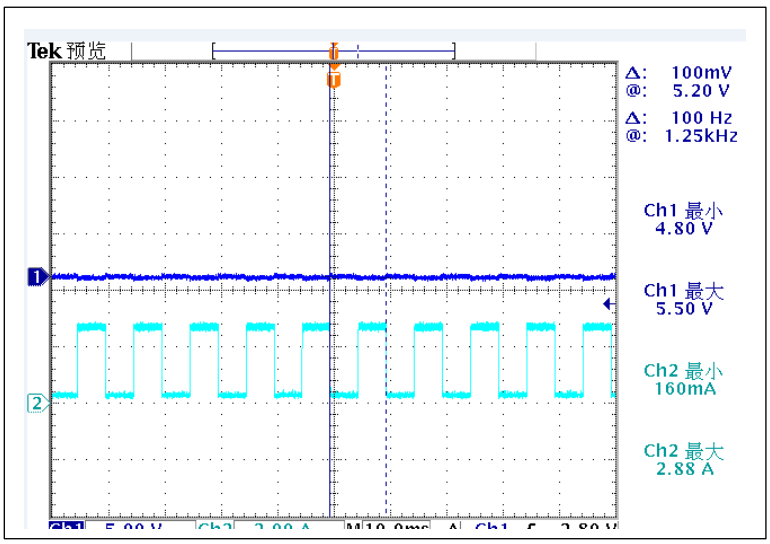
1..AC Input: 220V/50HZ

2..Output

Load:5V/0.3~2.7A,5m S



AC90 输入 5V 0.3~2.7A, 5m S



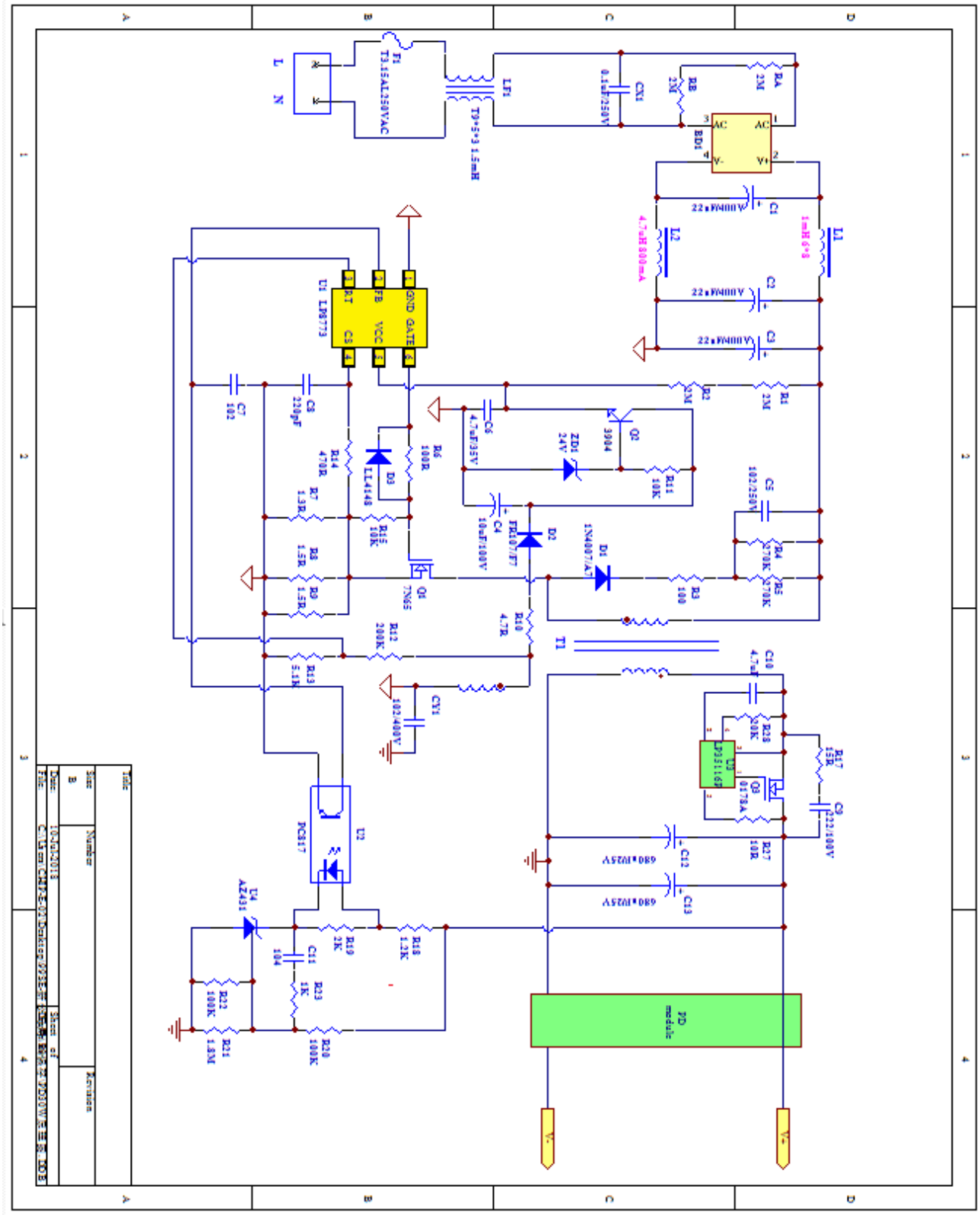
AC264 输入 5V 0.3~2.7A, 5m S

6. BOM

PCB	输入AC90-264V,输出PD30W 双面板 FR-4 PCB		1	PCB
贴片电阻	2M 1206 ±5%	国巨	2	R1,R2
	270K 1206 ±5%	国巨	2	R4,R5
	100R 1206 ±5%	国巨	1	R3
	1.2R 1206 ±1%	国巨	1	R7
	1.5R 1206 ±1%	国巨	1	R8
	1.8R 1206 ±1%	国巨	1	R9
	4.7R 0805 ±5%	国巨	1	R10
	10K 0805 ±5%	国巨	3	R11,R15, R13
	200K 0805 ±5%	国巨	1	R12
	430R 0805 ±5%	国巨	1	R14
	68R 0805 ±5%	国巨	1	R6
	1.2K 0603 ±5%	国巨	1	R18
	2K 0603 ±5%	国巨	1	R19
	10R 0805 ±5%	国巨	2	R17,R24
	20K 0805 ±5%	国巨	1	R25
	0.02R 0805 ±1%	国巨	1	R101
	91K 0603 ±5%	国巨	1	R102
	10K 0603 ±1%	国巨	2	R103,R104
	1K 0805 ±5%	国巨	1	R26
	10R 0805 ±5%	国巨	1	R27
	20K 0805 ±5%	国巨	1	R28
贴片电容	220pF/50V 0805 NPO±5%	国巨	2	C8,C101
	102/100V 0805 X7R ±10%	国巨	1	C9
	4.7UF/50V 0805 X7R±10%	国巨	2	C10,C106
	102/50V 0805 X7R ±10%	国巨	1	C7
	4.7UF/50V 1206 X7R±10%	国巨	1	C6
	2.2NF/1KV 1206 X7R ±10%	国巨	1	C5
	10NF/50V 0805 X7R ±10%	国巨	1	C104
	1UF/25V 0805 X7R ±10%	国巨	1	C107
	100NF/50V 0805 X7R ±10%	国巨	1	C108

X2电容	473K/275V		1	CX1
电解电容与固态电容	电解电容 22uF/400V Φ10*16mm		3	C1,C2,C3
	电解电容 10uF/100V		1	C4
	固态电容 470uF/25V		2	C12,C13
整流桥堆	DB307S		1	BD1
MOS管	7N65 TO-220F	士兰微	1	Q1
	LPN1010C	芯茂	1	Q3
插件光藕	EL817C DIP-4	亿光	1	U2
保险丝	T3.15A/350V 8.5*8*4mm P:5.08mm 慢断	良胜	1	F1
变压器	RM8-580uH		1	T1
共模电感	9*5*3mm-1.2mH		1	LF1
磁珠	4.7UH 1206		1	L2
Y1电容	102M/400V P:10mm 3+0.2/-0mm	松田	1	CY1
热敏电阻	5D-9		1	NTC1
螺丝	PM3x6mm圆头 机械牙		2	For Q1
散热片	25*20mm 厚1mm L型 单孔单针		1	HS1
USB	TYPE-C		1	TYPE-C-16PIN

7. Schematic


L
N
F1
T3.15AL250VAC
LF1
CX1
0.1uF/250V
RB
2M
RA
2M
BD1
AC
AC
V-
V+
C1
22uF/400V
L2
4.7uH/800mA
L1
1mH 6+6
C2
22uF/400V
C3
22uF/400V
U1
LD8773
RT
FB
GND
CS
VCC
GATE
C7
102
C8
220pF
R14
470R
D3
LL4148
R6
100R
R7
1.3R
R15
10K
R8
1.5R
R9
1.5R
Q1
7N65
R12
200K
R13
5.1K
C6
4.7uF/35V
ZD1
24V
Q2
3904
R11
10K
R2
2M
R1
2M
C4
10uF/100V
FR107/F7
D2
1N4007/A7
D1
C5
102/250V
R4
470K
R5
470K
R3
100
R10
4.7R
T1
CY1
102/400V
C10
4.7nF
R28
50K
U3
LP3116F
Q3
8178A
R17
15R
C9
222/100V
R27
10R
C12
680uF/25V
C13
680uF/25V
U2
PC817
U4
AZ431
R19
1K
C11
104
R18
1.3K
R22
100K
R21
1.8M
R23
1K
R20
100K
PD
module
V-
V+

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8. Transformer Drawing

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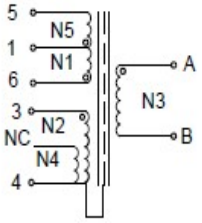
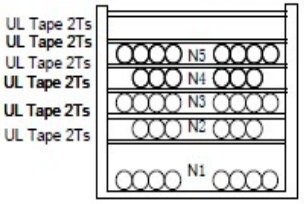
Sheet NO.: LP8773-T1

一、电气示意图



二、骨架尺寸

三、结构图



Bottom

四、磁芯和骨架

1. 骨架:RM8 6+0 立式 幅宽9.2mm
2. 磁芯: RM8磁芯 AE值：64 ,材质： PC44及以上;
3. 剪脚处理：Pin1剪半，Pin2拔除，A从底部出，B从顶部出，线长25mm, 剥镀5mm.
4. 6脚引镀锡线接磁芯接地。
5. 产品需真空含浸;

五、绕制参数及方法 ：注：骨架PIN脚朝外，绕线为顺时针方向

绕制顺序	起脚→收脚	线 径	匝 数	绕 制 方 法
N1	6 ⟶ 1	0.28Φ X1	29T	密绕一层/包2T胶带
N2	3 ⟶ 4	0.16Φ X 2 反馈层	24T	密绕一层/包2T胶带
N3	A ⟶ B	0.7Φ X 1 三层绝缘线	8T	密绕一层/包3T胶带
N4	4 ⟶ NC	0.16Φ X 2 屏蔽层	12T	居中密绕一层/包2T胶带
N5	1 ⟶ 5	0.28Φ X 1	25T	密绕一层/包2T胶带

六、电气特性

测试项目	脚 位	规 格	测试条件
初级电感量	6→5	0.58mH±5%	10KHz /0.3V
初级漏感	6→5		次级全部短路
绝缘耐压	初级→次级	3780V/3S	
	初级→磁芯	N/A	
	次级→磁芯	3780V/3S	

Rev.	Date	Changes	Check	Rev.	Date	Changes	Check

Title: 变压器规格书

PD-30W

9． 20V下降到5V的时间

测试条件： 空载20V转5V时需接个150R负载电阻