

纹波及噪声测试

1. 测试设备：

(1) 数字示波器：Tektronix TDS-1002C-Sc

(2) 电子负载机 Chroma6312A/6314A

(3) 交流电源供应器：Chroma 61603

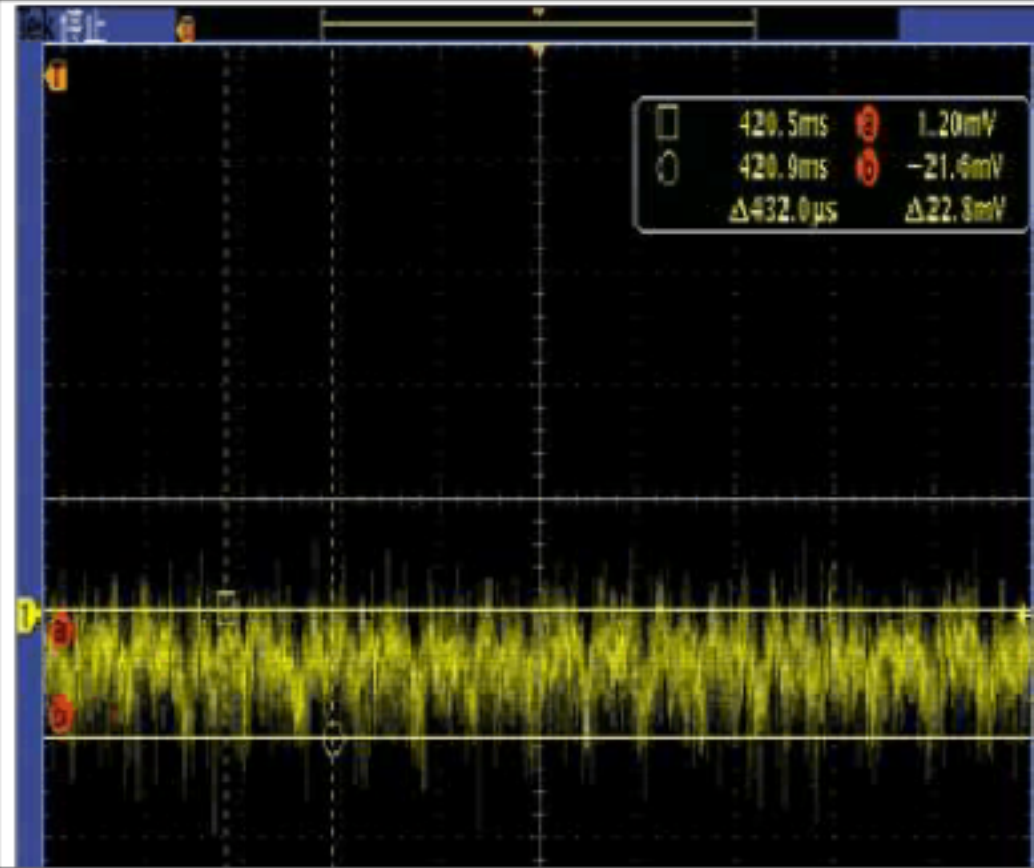
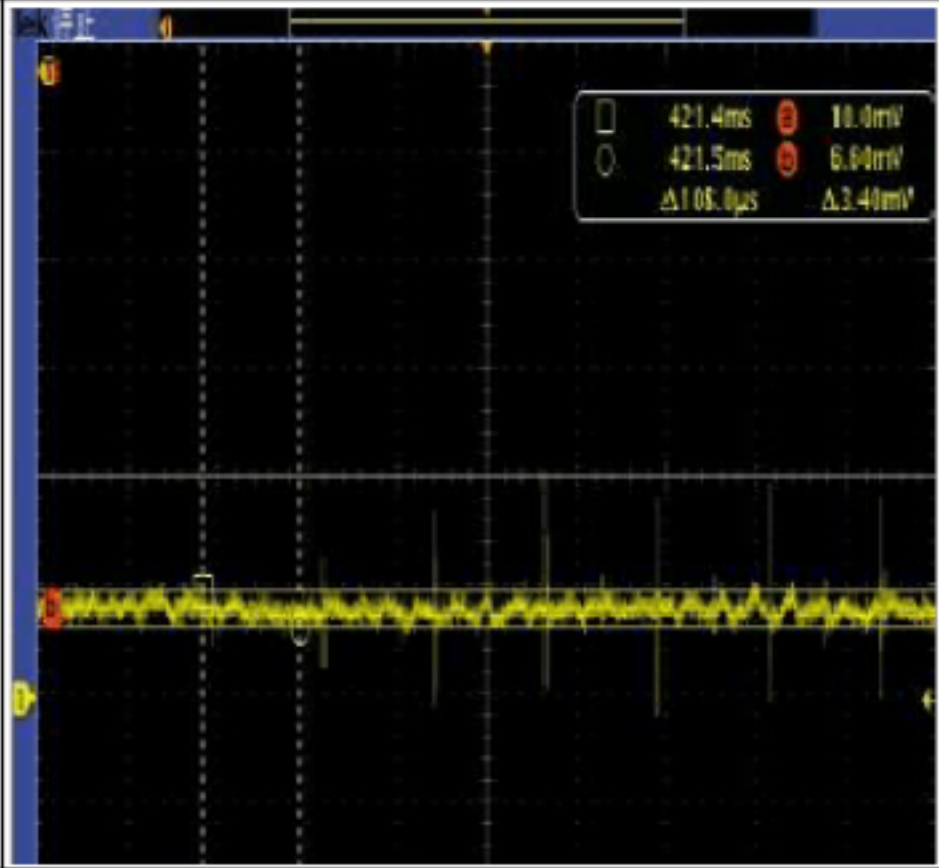

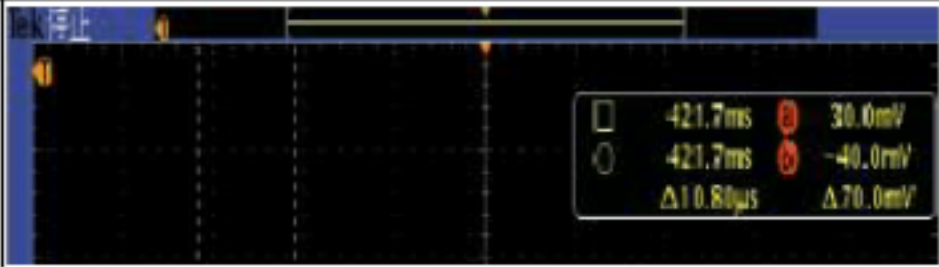
2. 测试条件：

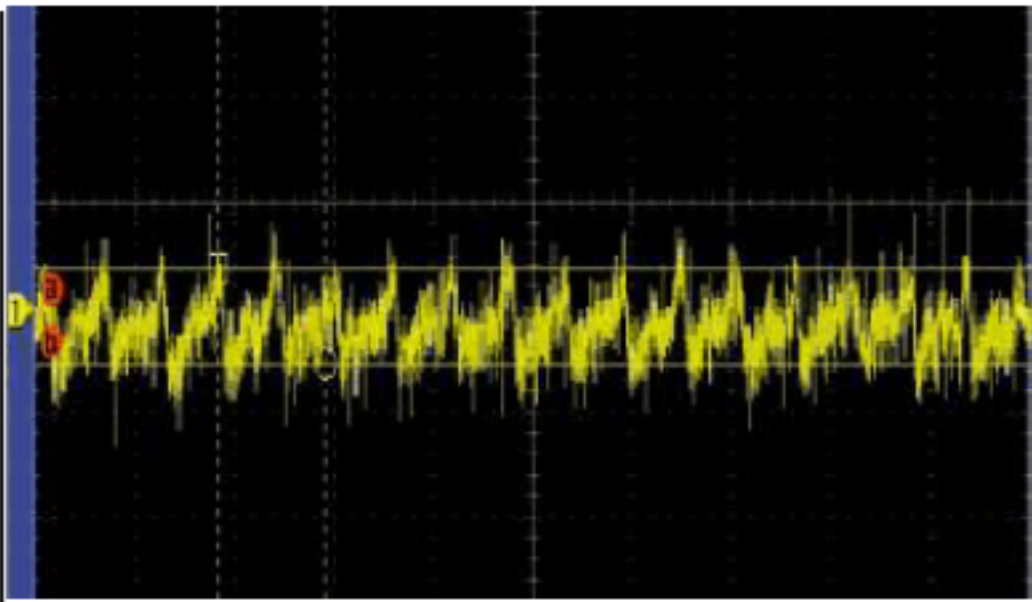
温度 25℃.加载时加满载和最小载，输出端并联一个 0.1uF 的陶瓷电容和一个 10uf 的点解电容，示波器带宽设置在 20MHz

3. 测试结果：

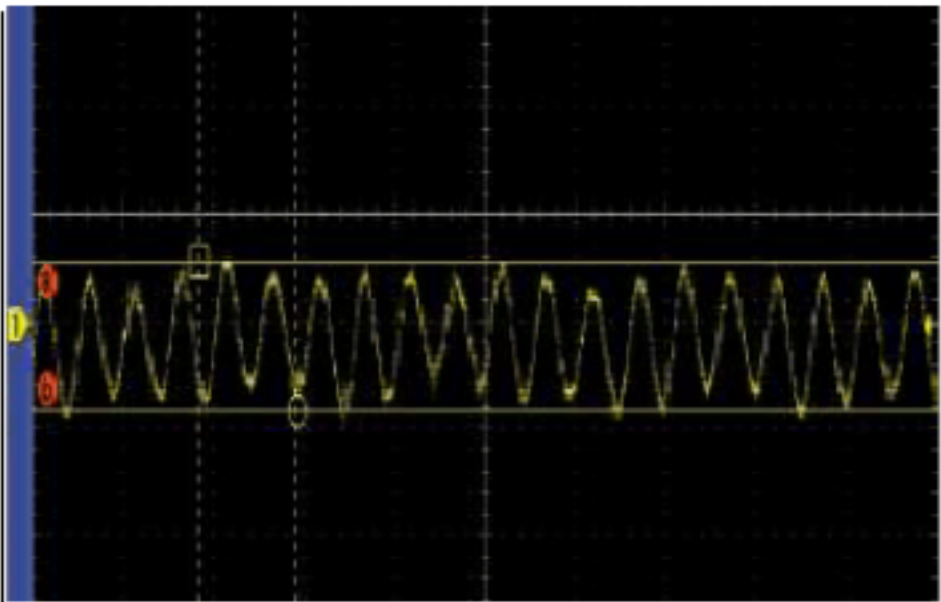
序号	输入电压	输出电压	负载	测试数据 (mVP-P)	标准（纹波电压）	结果
1	220V/50Hz	3.3V	0.5A	22.8	<50mV	PASS
2		+5Vsb	0.1A	3.4	<50mV	PASS
3		+5V	0.5A	45.0	<50mV	PASS
4		+12V	0.5A	70.0	<120mV	PASS
5		+24V	0.5A	46.0	<250mV	PASS
6		+3.3V	5.5A	34.8	<50mV	PASS
7		+5Vsb	2A	6.6	<50mV	PASS
8		+5V	6.5A	50.0	<50mV	PASS
9		+12V	12A	98.0	<120mV	PASS
10		+24V	20A	115.0	<250mV	PASS

波形如下图所示：

1	2
	
Ch1: +3.3V; AC INPUT 220V/50Hz; Min Load	Ch1: +5VSB; AC INPUT 220V/50Hz; Min Load
3	4
	

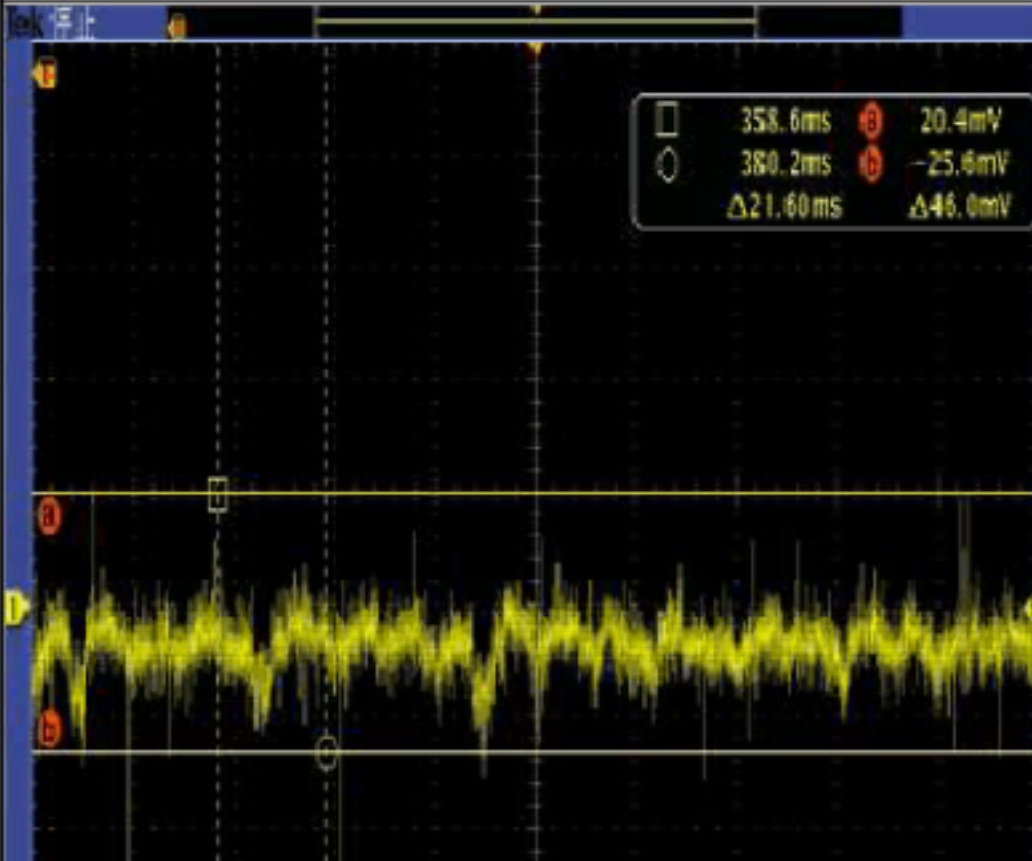


Ch1: +5V; AC INPUT 220V/50Hz; Min Load



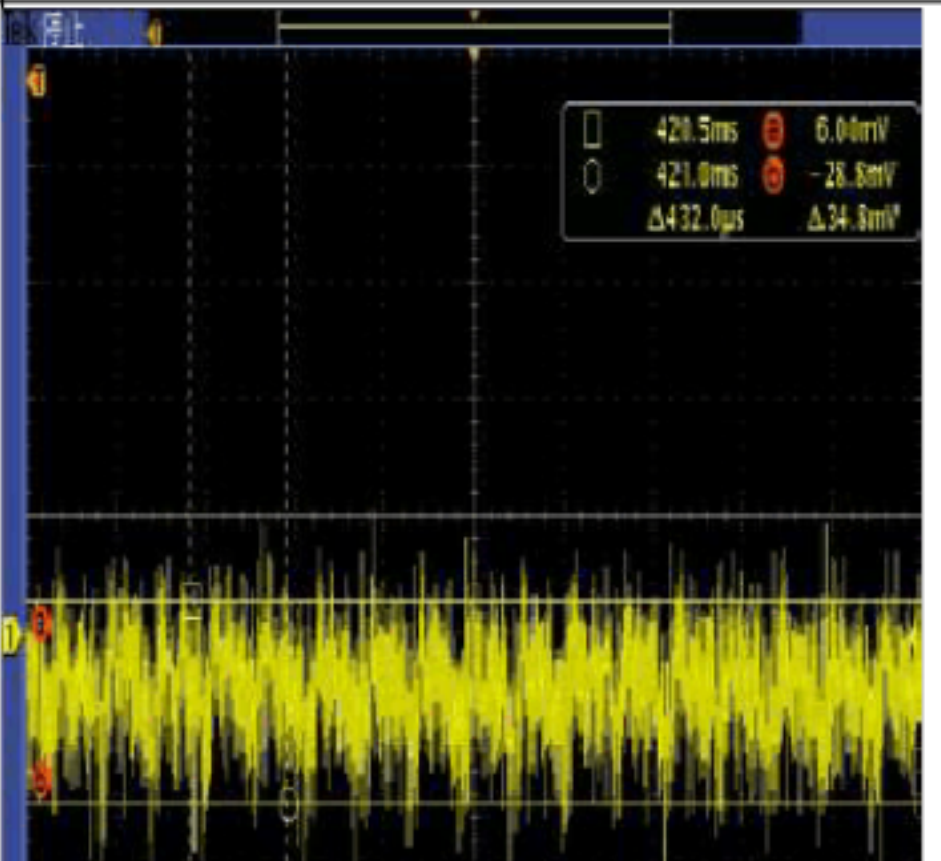
Ch1: +12V; AC INPUT 220V/50Hz; Min Load

5



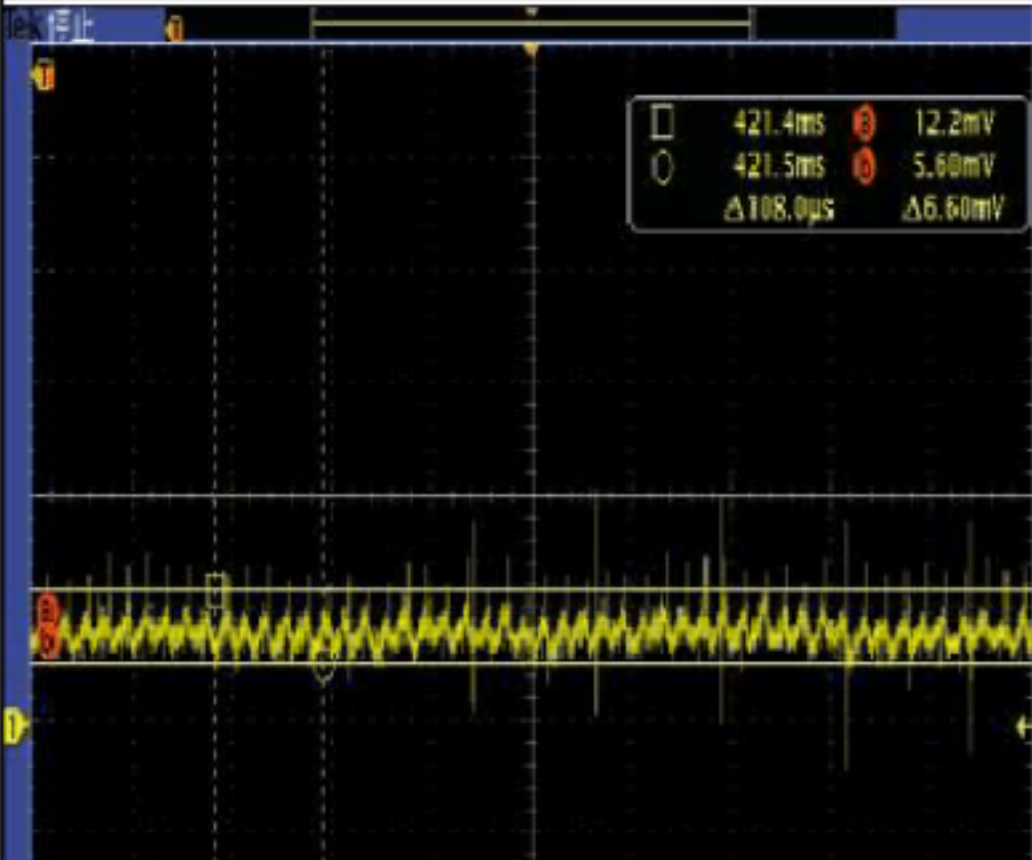
Ch1: +25V; AC INPUT 220V/50Hz; Min Load

6



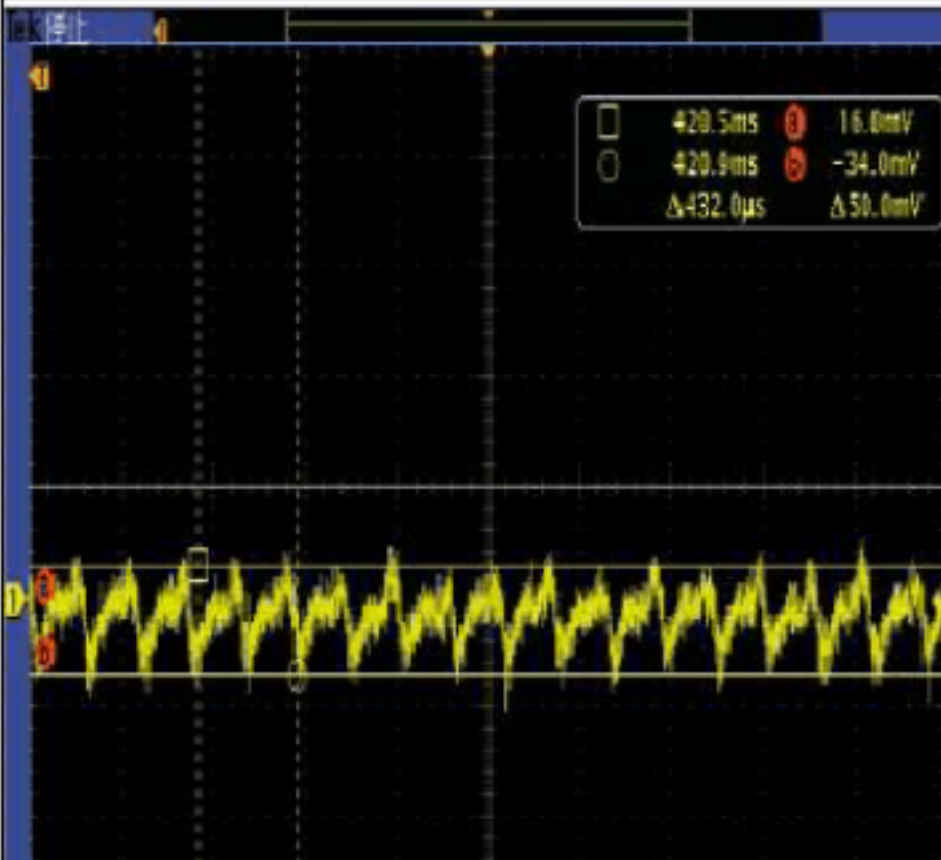
Ch1: +3.3V; AC INPUT 220V/50Hz;Full Load

7



Ch1: +5VSB; AC INPUT 220V/50Hz;Full Load

8



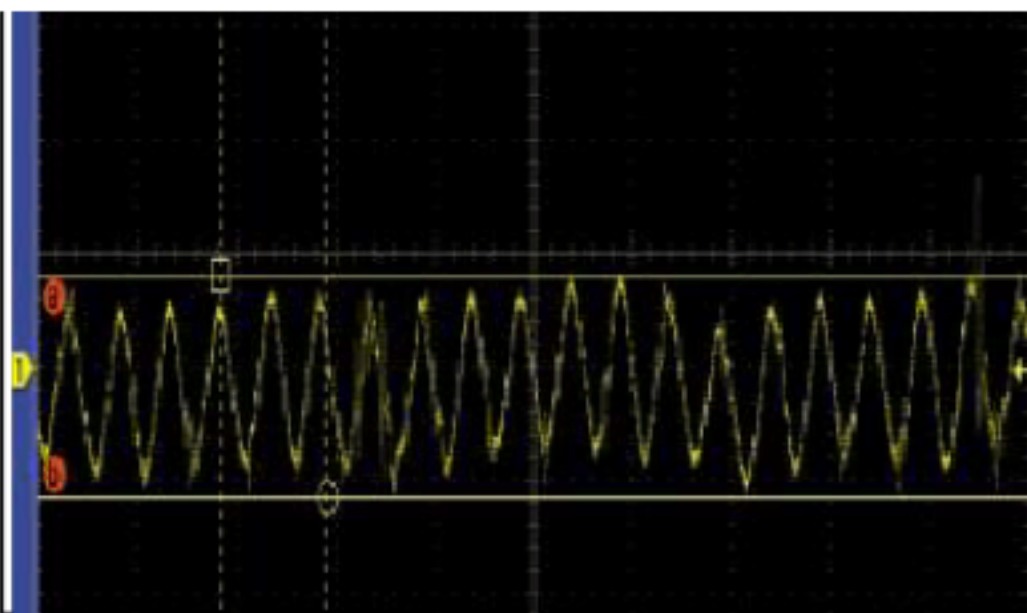
Ch1: +5V; AC INPUT 220V/50Hz;Full Load

9

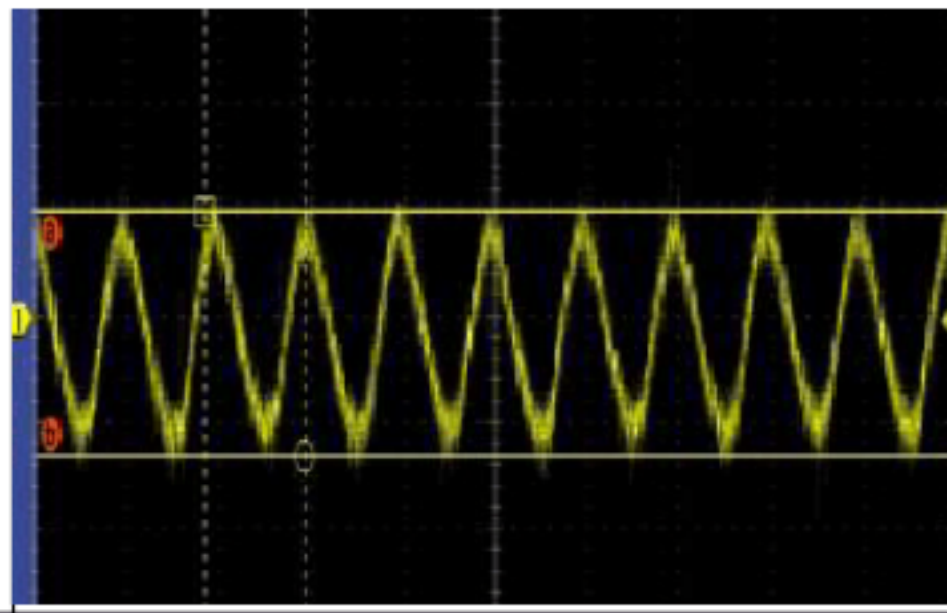


10





Ch1: +12V; AC INPUT 220V/50Hz;Full Load



Ch1: 25V; AC INPUT 220V/50Hz;Full Load