

DC-AC INVERTER

SPECIFICATION FOR APPROVAL



CUSTOMER : _____

TRANSTEK PART NO: INV2L-02(03) VS

DELIVERY DATE: 2008-6-30

TRANSTRK REV: _____

CUSTOMER PART NO: _____

SAMPLE QUANTITY: _____

CUSTOMER REV: _____

SAMPLE PURROSE: _____

PREARED BY	CHECKED BY	APPROVED BY
TRANSTEK CACHET		

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1.0 Revision History

Revision	Date	Modify Item	Modify Reason	Prepared	Approved
REV: 1.0	2008-1-4	Initial launch			Yingfei Hao

2.0 Application & Notice (注意事项)

This DC to AC inverter is designed for the backlight of LCD with 2 Cold Cathode Fluorescent Lamp.

此产品适用于 2CCFL LCD。

Notice:

2.1 For Safety Issue, please keep 4.0mm at least from the metal parts of the system go the inverter .Or, put a high –voltage insulator between the inverter and the metal parts to avoid the situation of Hi-POT failure of arcing ---etc.

(基于安全问题，请在组装 Inverter 时，确保 Inverter 和系统金属材料间保持至少 4mm 以上的距离，或是使用足够绝缘等级（3KV）绝缘材料隔离，以避免高压放电的产生)

2.2 Don't twist ,deform ,drop or knock the inverter during assembly.

(请于组装 Inverter 时，确实避免扭曲，弯折，大力碰撞及掉落产生)

2.3 The inverter is usually designed without the case. Please take care about ESD at anytime.

(因为无外壳保护，请在任何时候务必注意防静电处理)

2.4 Due to the characteristic of Panels, the brightness is sensitive about ESD at anytime.You must measure it in the same condition and waiting for power on 10~30 minutes.

(基于 Panel 的特性，其辉度易受温度影响，量测时，请用同样的条件，并于开机 10~30 分钟后读值)。

3.0 Environment Characteristics (环境特性要求)

3.1 Temperature (温度):

Storage (储存): -25℃~70℃.

Operating (工作): -5℃~50℃.

3.2 Humidity (湿度):

Storage (储存): 10%~95% RH , non-condensing

Operating (工作): 10%~95% RH , non-condensing

3.3 MTBF (平均无故障时间): 60 '000Hrs@25℃.

4.0 General Requirements (电气规格)

4.1 Input characteristics (输入特性)

PARAMETER 参数	SYMBOL 符号	MIN 最小值	TYP 典型值	MAX 最大值	UNIT 单位	REMARK 备注
INPUT VOLTAGE 输入电压	V _{in}	10.8	12.0	13.2	V	Input range= V _{in} ± 10%
INPUT CURRENT 输入电流	I _{in}	0.7	-	1.2	A	V _{in} =12V, V _{bri} =0V(2lanps)
INPUT POWER 输入功率	P _{in}	-	12	-	W	V _{in} =12V, V _{bri} =0V(2lanps)
INPUT VOLTAGE 开关电压	V _{on/off}	0	-	1	V	Off State
		2.5	-	5		On State
INPUT VOLTAGE 亮度调整电压	V _{adj}	0	-	5	V	最大亮度=0V, 最小亮度=5V
EFFICIENCY 效率	η	-	85	-	%	V _{in} =12V, V _{on/off} =5V V _{adj} =0V, Load=110K Ω X2

4.2 Output Characteristics (输出特性)

PARAMETER 参数	SYMBOL 符号	MIN 最小值	TYP 典型值	MAX 最大值	UNIT 单位	REMARK 备注
LAMP CURRENT 灯管电流 (亮)	I _L	6.5	7.0	7.5	mA	V _{in} =12V V _{on/off} =5V V _{adj} =0V Load=110K Ω X2
LAMP CURRENT 灯管电流 (暗)	I _L	1.5	2.3	3.0	mA	V _{in} =12V V _{on/off} =5V V _{adj} =5V Load=110K Ω X2
LAMP VOLTAGE 灯管工作电压	V _L	500	600	700	V _{rms}	V _{in} =12V, on/off=5V V _{adj} =0V Load=110K Ω X2
FREQUENCY 灯管工作频率	FL	40	50	60	KHz	V _{in} =12V, on/off=5V V _{adj} =0V Ta=25°C Load=110K Ω X2

4.3 Pin Assignments (端子定义)

DC Input: (直流输入)

Location (位置) : CN1

Connector type (端子型号): PH: 2.0mm-6Pin Dip 90° or equivalent

Pin NO (引角号)	Symbol (符号)	Description(描述)
1、2	VIN	POWER SUPPLY (RANGED FROM 10.8V TO 13.2V; 12V TYP.)
3、4	GND	POWER SUPPLY GROUND
5	ADJ(0-5V)	BRIGHTNESS CONTROL (0V: MAX. BRIGHTNESS; 5V: MIN. BRIGHTNESS)
6	ENA(0-5V)	OFF: DC:0V ~DC:1.0V; ON:DC:2.5V~DC:5V

Location (位置): CN2, CN3

Connector type (端子型号): 3.5mm-2Pin SMD or equivalent

Pin NO (引角号)	Symbol (符号)	Description(描述)
1	HV	HIGH VOLTAGE OUTPUT
2	LV	LOW VOLTAGE OUTPUT

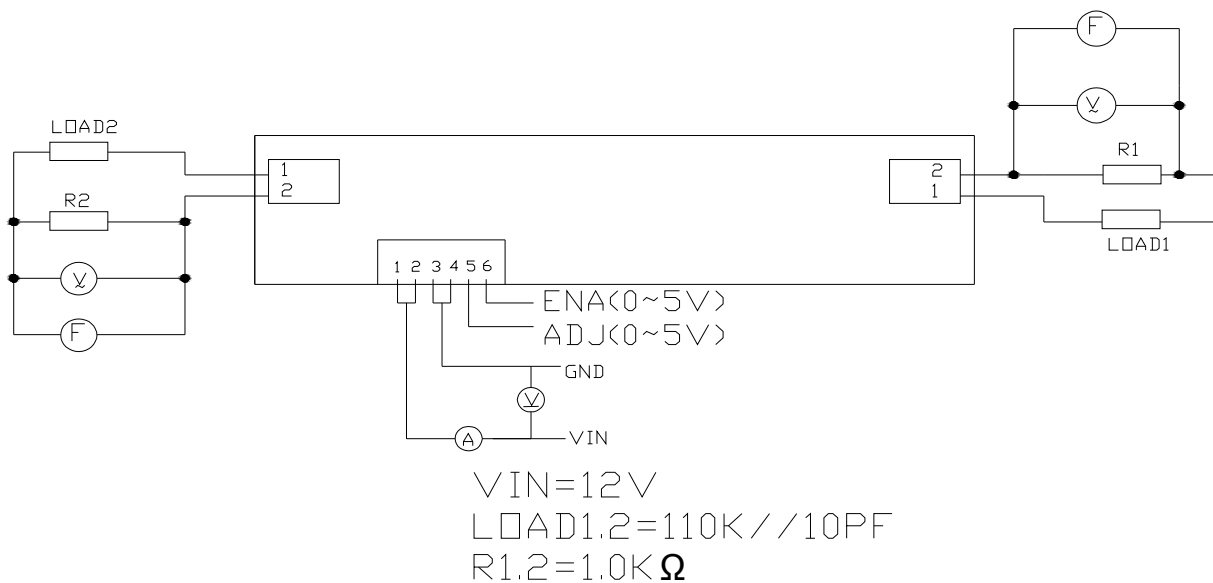
4.4 Test Equipment (测试设备)

Oscilloscope (示波器): Tektronix TDS1012

High Voltage Probe (高压探头): Tektronix P2220

Multi-Meter(万用表): FLUKE45

5.0 Test Circuit (测试电路)

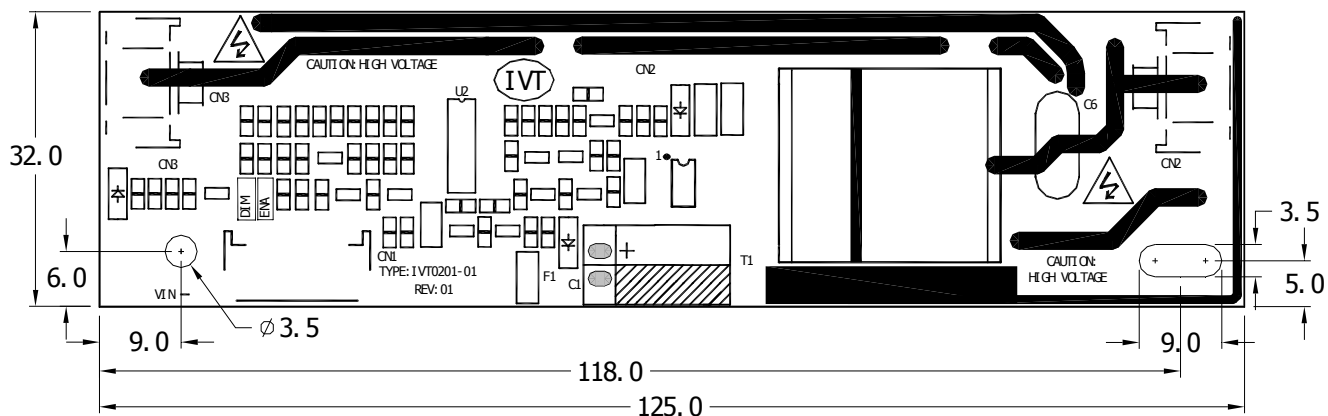


6.0 Mechanical Characteristics (尺寸描述)

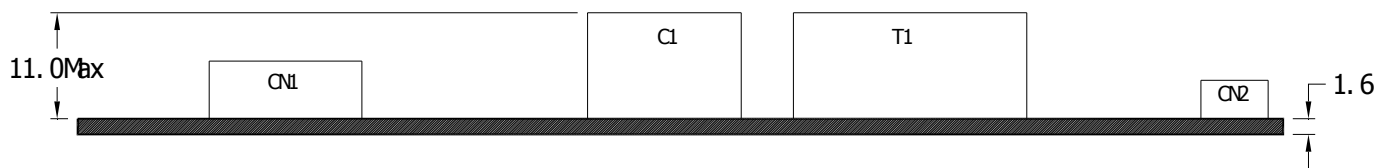
Item(项目)	L*W*T(mm)	For use with
Dimension(尺寸)	L125*W32*T1.6	15"~17"LCD'S

7.0 Outline Dimensions (结构图)

Top View

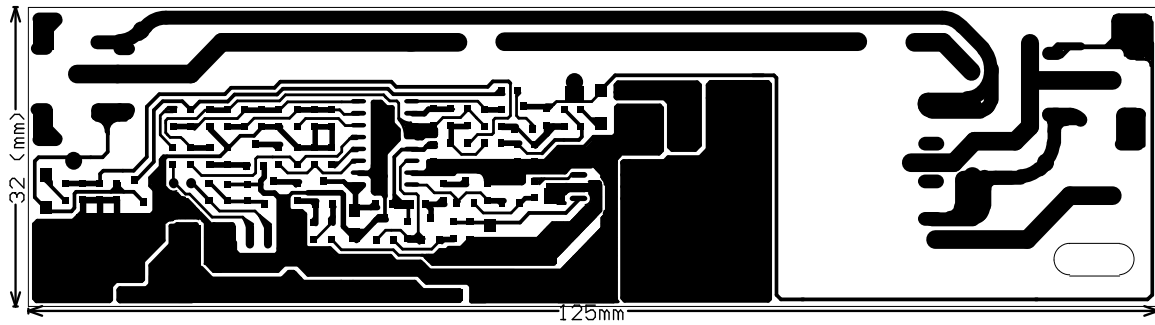


Lateral View

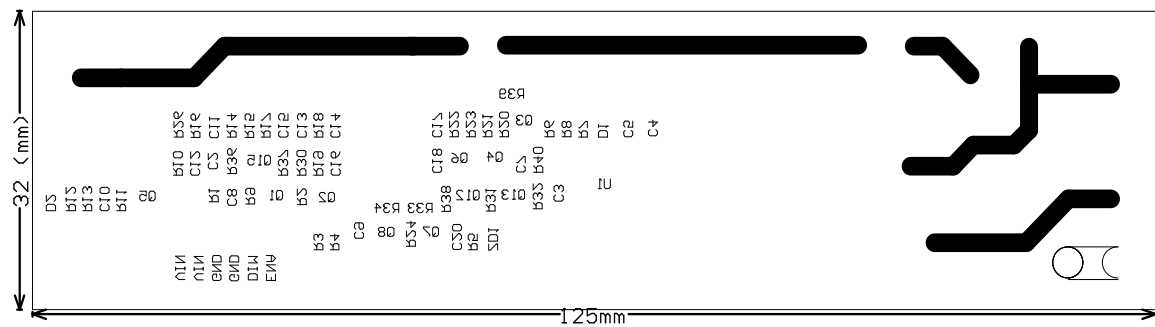


9.0 PCB Specification (PCB 规格)

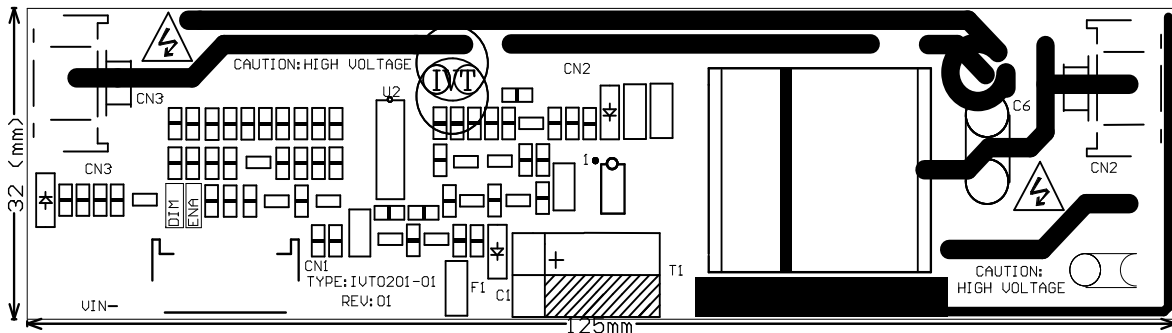
Top layer



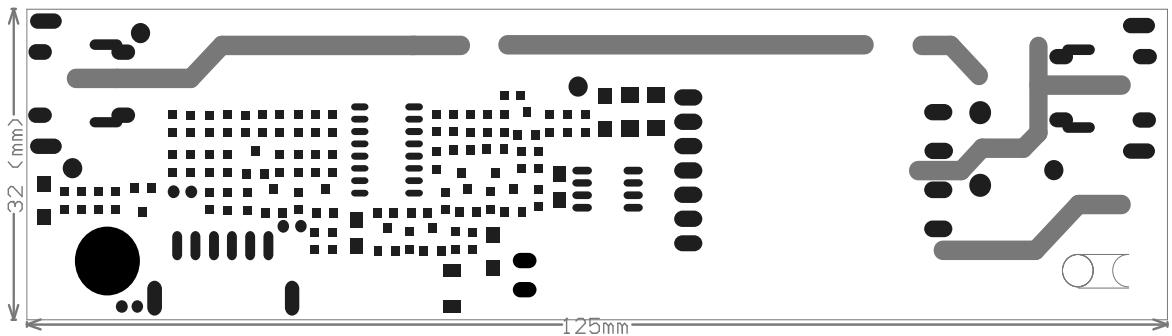
Bottom Layer



Top Overlay



Top Solder



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