

TI1502SA-01 INVERTER ELECTRICAL SPECIFICATION

1. APPLICATION

This specification is applied to CCFL inverter unit for 18.5" 2L color LCD backlight.

Panel Type : CMO M185B1-L02 Rev.C1 & AUO M185XW01 V.0

& CMO M185B1-L03 Rev.C1 & CPT CLAA185WA02

Weight : 31g

2. ELECTRICAL CHARACTERISTICS

NO.	Item	Symbol	Condition	Min.	Typ.	Max.	Unit
1	Input Voltage	Vin		11	12	13	V
2	Input Current	Iin	Vin= 12 V, Vadj= 0 V (2 Lamp)	---	---	1.5	A
3	Inrush Current	Iin	Vin= 12 V, Vadj= -- V (Imax)	---	---	1.8	A
4	Input Power	Pin	Vin= 12 V, Vadj= 0 V (2 Lamp)	---	---	19.8	W
5	Backlight	Von	Normal Operation	2.4	---	5.0	V
	ON/OFF Control	Voff	Shutdown	0	---	1.2	V
6	Brightness Adjust (Lamp Current Control)	Vadj	Normal Operation	5	---	0	V
7	Output Voltage	Vout	Vin= 12 V, Iout= 7.0 mA (1 Lamp) (REF,VALUE)	---	775	---	Vrms
8	Output Current (Each Connector)	Iout(Min)	Vin= 12 V, Vadj= 5 V (1 Lamp) Ta= 25 °C, After running 30min.	2.0	2.5	3.0	mArms
		Iout(Max)	Vin= 12 V, Vadj= 0 V (1 Lamp) Ta= 25 °C, After running 30min.	6.5	7.0	7.5	mArms
9	Burst Frequency	Freq	Vin= --- V, Vadj= --- V	---	---	---	Hz
10	Frequency	Freq	Normal Operation	50	55	60	KHz
11	Lamp Start Voltage	Vopen	No Load, Vin= 12 V, Ta= 25 °C	1350	---	1800	Vrms
12	Efficiency	η	Vin= 12 V, Load= PANEL	75	---	---	%
13	Striking time	Tscp	Vin= 12 V, Vadj = 0 V	1	---	2	Sec
14	Open Lamp Protection	Latched					
15	Short Lamp Protection	Latched					

Note : The lamp start voltage is tested under one lamp opened Circuit, with a 10cm Hv-wire connected to Hv Probe to simulate lamp wire.

MODEL NAME	TI1502SA-01	DATE	2009/5/7	Code.	3	REV.	A
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3. INTERFACE SPECIFICATION

Input Connector : CN1
: CS JS-1125R-05 or equ

Pin No.	Signal	Description
1	Vin	Input Voltage
2	GND	Power System Return
3	ON/OFF	ON/OFF Control
4	Vadj	Lamp Control
5	N.C	N.C

Output Connector : CON3,CON4
: CS JS-2013-02(M)(LOCK) or equ

Pin No.	Signal	Description
1	Lamp High	High Voltage Output For High Side CCFL
2	Lamp Low	Low Voltage Output For Low Side CCFL

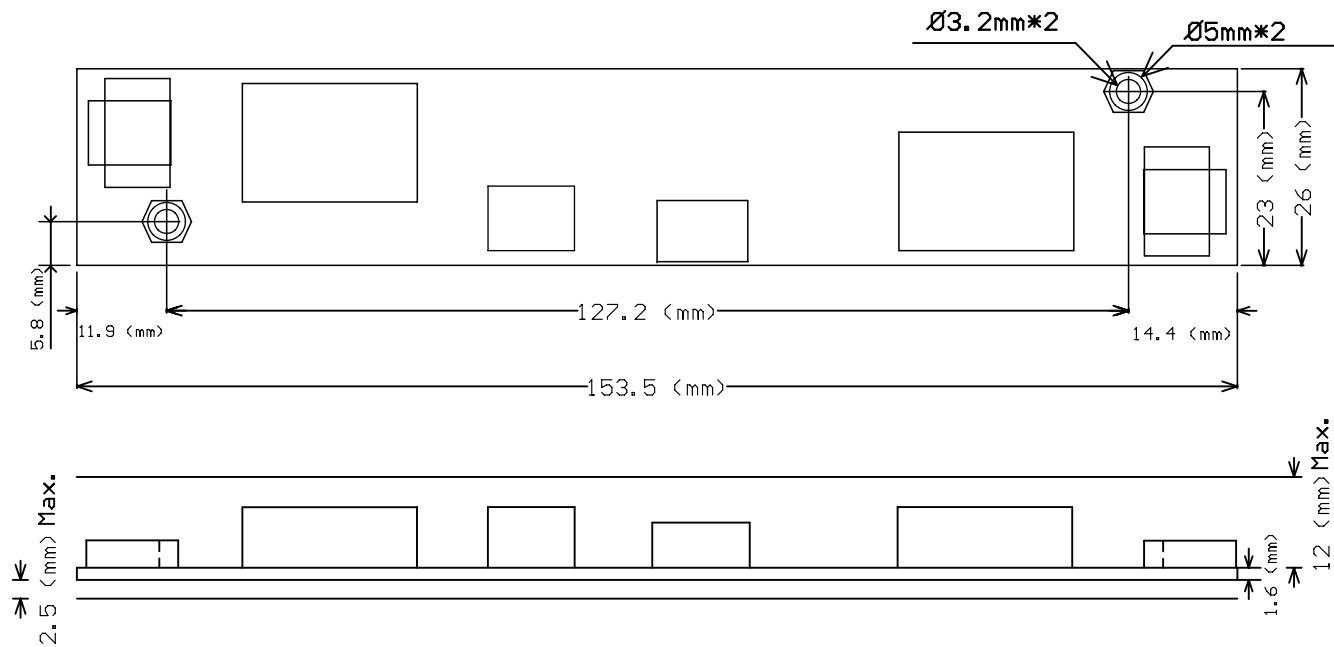
4. ENVIRONMENT

Operation Temperature	0 ~ 50 °C
Operation Humidity	90 % Max. RH
Storage Temperature	- 10 ~ 85 °C
Storage Humidity	95 % Max. RH

5. TEST EQUIPMENT

Dc Power Supply	☒ Toward 6303D	☐ Toward 3306D
Scope	☐ Tektronix TDS1012	☐ Tektronix TDS-360 ☒ Tektronix TDS2024
	☐ Tektronix TDS 3032B	☐ Tektronix DPO 4032
High Voltage Probe	☒ Tektronix P6015A (1000x3.0pF 100MΩ)	
Current Probe	☐ Tektronix TM502A	☐ Tektronix A6302 ☒ Tektronix P6022
	☒ FLUKE45	

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TPEI		TAIWAN POWER CONVERSION INC., LTD			
FILE NAME:		PCB Material Tolerance (mm)			
T11502SA-01 Code:3		T	1.0	1.2	1.6
		FR4	+0.20/-0.13	+0.20/-0.13	+0.20/-0.13
		FR1	+0.18/-0.13	+0.18/-0.13	+0.18/-0.13
		CEM1	+0.18/-0.13	+0.18/-0.13	+0.18/-0.13
DATE:		TOLERANCE DIM(mm)			
98/05/06		X.	+/-0.5		
Dimension:		XX	+/-0.25		
153.5 x 26mm (+/-0.5mm)		XXX	+/-0.12		
		XXXX	+/-0.08		