FOR MESSRS :

SPECIFICATION FOR APPROVAL

(FOR LCD MNT 19" 4 LAMP APPLICATION PURPOSE)

TFT LCD BACKLIGHTING INVERTER

PART NO. : FIF1942-33B

BUYER'S PART NO. :

APPROVED	REFERENCE

(PLEASE RETURN ONE OF THESE TO US IMMEDIATELY WITH YOUR SIGNATURE FOR APPROVAL)

TESTED BY	CHECKED BY	APPROVED BY
J.S. Kim	J.H. Son	S.I. Lim

CONTENTS OF SPECIFICATION

INVERTER PART NO. : FIF1942-33B

1.Revision History

REV NO.	Revise Date	Reason/Issue	Revised Description

2.General Description

SCOPE:

This DC-AC inverter was developed for 4 CCFL lamps of LCD backlight system.

3.Features

- On/Off control
- Liner output current adjustment
- Wide Dimming Range

4.Applications

- 19" 4 LAMP LCD Monitor / TV

5.Absolute maximum rating

- Input supply voltage : 11 ~ 13V
- Output current(1 Lamps) : 8.0mA rms
- Output power(1 Lamps) : 6.9W
- Ambient operating temperature : 0℃ ~ 60℃
- Storage temperature : -25℃ ~ 85℃
- Operating & Storage Humidity : 10% ~ 85%

6. Electrical Characteristics

▶ Analog Dimming

▶ Input Voltage(Vdc) : 11.0 ~ 13.0

No.	Items (Unit)	Sign.	Condition		Min.	Typ.	Max.
1	Input Current (A)	Iin	Vin=12V	CTRL=0V	1.7	2.0	2.3
				CTRL=5V	1.0	1.2	1.4
2	Output Current 1,2(mA)	Iout1,2	Vin=12V	CTRL=0V	6.5	7.3	8.0
				CTRL=5V	2.5	3.3	4.0
3	Output Current 3,4(mA)	Iout3,4	Vin=12V	CTRL=0V	6.5	7.3	8.0
				CTRL=5V	2.5	3.3	4.0
4	Lamp Frequency (kHz)	f	Vin=12V	CTRL=5V	40	45	50
5	Lamp Voltage (V)	f	Vin=12V		-	700	-
6	ON/OFF Control	ON	Vin=12V, ON/OFF=5V		Normal Operation		
		OFF	Vin=12V, ON/OFF=0V		Shunt-down (Lamp off)		
7	Dim Adjust (Lamp Current Control)	CTRL	CTRL=0V,Max Current		0.0 ~ 5.0 Volt.		
			CTRL=5V,Min Current				
8	Kick-Off Voltage(Vrms)	Vk-off	Kick-Off		MORE THAN 1600Vrms		

7. Functional Pin Description

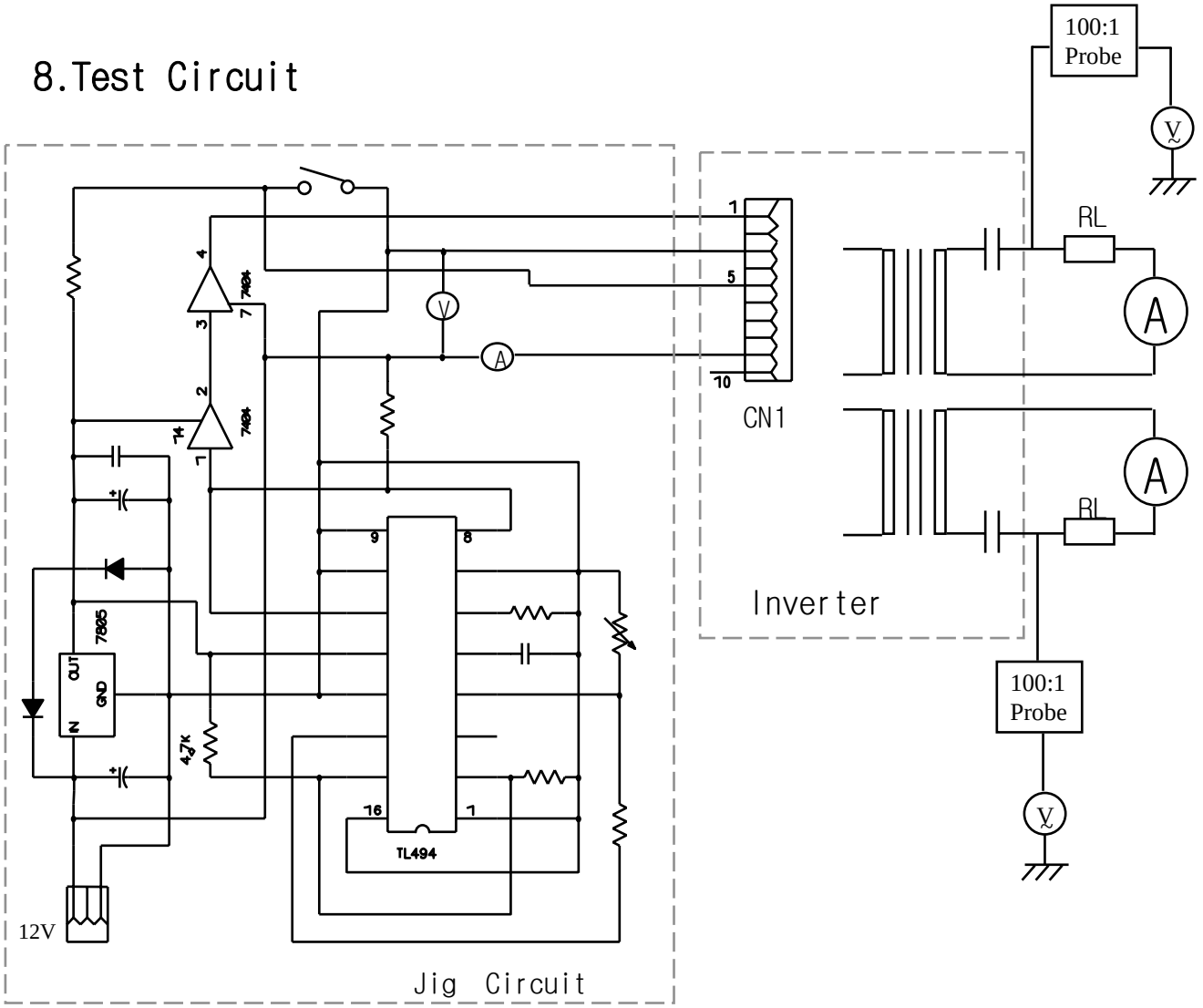
7.1. Input Connector CN1 : 12505WR-12A00(YEON-HO)
53261-1290(MOLEX)

Pin No.	Symbol	Description
10,11,12	Vin	Input Voltage : 12V ± 1V
1,3.5.6.8.9	GND	GND
2	CTRL	Dim Adjust, Apply 0V ~ 5Vdc to Control Lamp Current 0 V:MAX 5V :MIN
4	ON / OFF	Power System Return (5V:ON, 0V:OFF)

7.2. Output Connector CN2,CN3,CN4,CN5 :
20015WR-05A00 (Yeon Ho,MOLEX,JST)

Pin No.	Symbol	Description
1	Lamp H1	High Voltage connection to high side of lamp.
2	Lamp L1	Low Voltage connection to low side of lamp.

8.Test Circuit

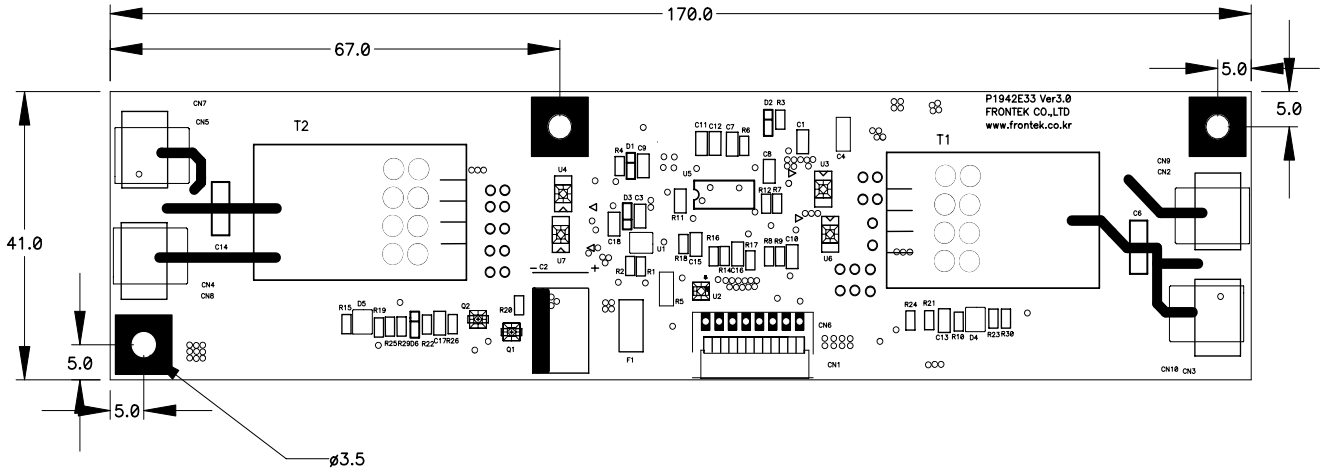


* Input Volt Meter : Fluke 45
* Input Current Meter : Fluke 45
* Output Current Meter : Fluke 45(Yokogawa P2016-1)

9.Mechanical Drawings

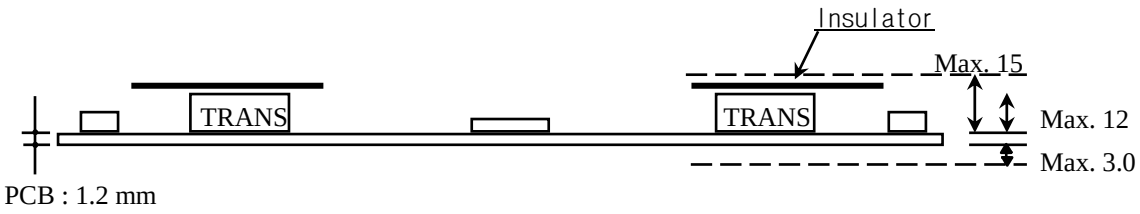
9-1.P.W.B

*. Unit : mm
*.Tolerance : ± 0.2mm

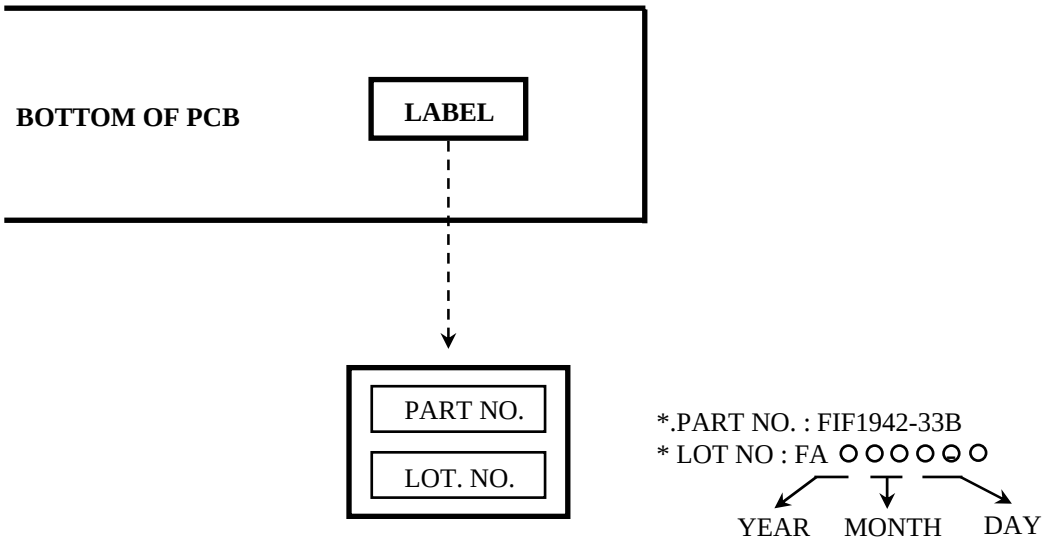


▶ **PCB : 1.2 mm**

9-2.Trans & Insulator



9-3.Marking



10. Quality Assurance Test

NO.	ITEMS	TEST CONDISIONS	Numbers of Samples	NOTE
0	Electrical Characteristics & Appearance test	Electrical Characteristics & Mechanical size on approval sheet	21 EA	
1	High temperature Operation Test	50℃, Vin = 13.2V, Ctrl = 0V, 500Hr	3 EA	
2	Low temperature Operation Test	0℃, Vin = 13.2V, Ctrl = 0V, 240Hr	3 EA	
3	High temperature Storage Test	80℃, 240Hr	3 EA	
4	Low temperature Storage Test	-20℃, 240Hr	3 EA	
5	High temperature & High Humidity Storage Test	40℃, 95%RH, 240Hr	3 EA	
6	Heat Shock Test	-20℃(0.5Hr) + 80℃(0.5Hr) 20 Cycle	3 EA	
7	Power On/Off test	Vin = 13.2V, On/Off = 1000 Cycle	3 EA	On Time(2 sec) + Off Time(2 Sec)