

TI1506WM-01 INVERTER ELECTRICAL SPECIFICATION

1. APPLICATION

This specification is applied to CCFL inverter unit for 15" 6L color LCD backlight.

Panel Type : Mitsubishi AA150XR01

2. ELECTRICAL CHARACTERISTICS

(LOAD Main fact : 99K Ohm & 5PF/3KV; Reference : Mitsubishi AA150XR01)

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 (6 Lamp)	---	---	2.82	A
3	Inrush Current	Iin	Vin= 12 V, Vadj= 0 V (Imax)	---	---	6	A
3	Input Power	Pin	Vin= 12 V, Vadj= 0 V (6 Lamp)	---	---	33.84	W
4	Backlight	Von	Normal Operation	2.4	---	5	V
	ON/OFF Control	Voff	Shutdown	0	---	1.2	V
5	Brightness Adjust (Lamp Current Control)	Vadj	Normal Operation	4.85	---	0	V
6	Output Voltage	Vout	Vin= 12 V, Iout= 6.5 mA (1 Lamp) (REF,VALUE)	---	620	---	Vrms
7	Output Current (Each Connector)	Iout(Max)	Vin= 12 V, Vadj= 0 V (1 Lamp) Ta= 25 °C, After running 30min.	5.9	6.5	7.1	mArms
		Iout(Min)	Vin= 12 V, Vadj= 4.85 V (1 Lamp) Ta= 25 °C, After running 30min.	---	0	---	mArms
8	Burst Frequency	Freq	Vin= 12 V, Vadj= 2.5 V	200	240	280	Hz
9	Frequency	Freq	Normal Operation	50	60	70	KHz
10	Lamp Start Voltage	Vopen	Vin= 12 V, Ta=25°C	1100	---	---	Vrms
11	Efficiency	η	Vin= 12 V, Load= 99K Parallel 5PF/3KV	75	---	---	%
12	Striking time	Tscp	Vin= 12 V, Vadj = 0 V	1	---	2	Sec
13	Open Lamp Protection	NO DAMAGE					
14	Short Lamp Protection	NO DAMAGE					

Note : The lamp start voltage is tested by CN1 or CN3 open .

MODEL NAME	TI1506WM-01	DATE	2009/5/13	Code.	Z	REV.	B
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3. INTERFACE SPECIFICATION

Input Connector : CON1
: CS JS-1261R-06 (NM) or equ.

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

Output Connector : CN1,CN3
: SUNDA AS018S0332R1 or equ

Pin No.	Signal	Description
1,4,7	Lamp HIGH	Low Voltage Output For Low Side CCFL
2,3,5,6	N.C	N.C

Output Connector : CN2,CN4
: CS JS-2010-03/4mm (9TNM) or equ

Pin No.	Signal	Description
1,3,5	Lamp Low	Low Voltage Output For Low Side CCFL
2,4	N.C	N.C

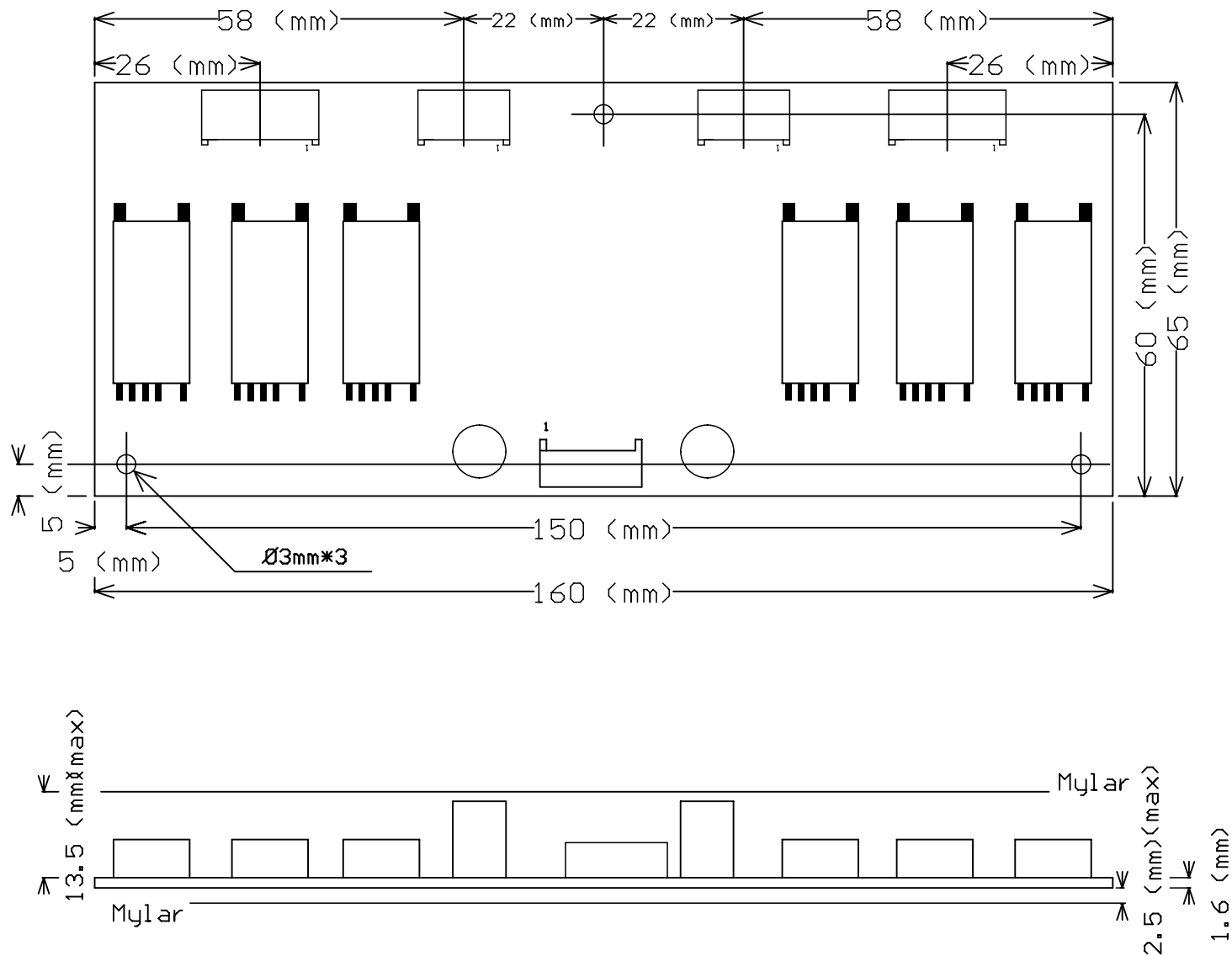
4. ENVIRONMENT

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		
Scope	☐ Tektronix TDS1012		☐ Tektronix TDS-360
	☐ Tektronix TDS2024		☒ 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: TI1506WM-01		PCB Material Tolerance (mm)	
DATE: 98/02/13		TOLERANCE DM(mm)	
Dimension: 160x 65mm		T	
		FR4	
		FR1	
		CEM1	
		1.0	
		1.2	
		1.6	
		X	
		X,X	
		X,XX	
		X,XXX	
		+/-0.5	
		+/-0.25	
		+/-0.12	
		+/-0.08	