

EXAMINED BY :	EMERGING DISPLAY TECHNOLOGIES CORPORATION	FILE NO . MTL-00050
Kevin Kuo		ISSUE : JUN.21,2002
APPROVED BY:		TOTAL PAGE : 3
Roger Yang		VERSION : 3

MATERIAL SPECIFICATIONS

PART NAME :

CCFL INVERTER

CODE NO. :

IA-EM02A1 (51-30000-5)

FOR MESSRS :

CUSTOMER'S APPROVAL

DATE :

BY :

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RECORDS OF REVISION		DOC . FIRST ISSUE APR.02,1999																																																																																											
DATE	REVISED PAGE NO.	SUMMARY																																																																																											
JUN.18,2002	1	<div>2. ELECTRICAL SPECIFICATION</div> <table><tr><td>ITEM</td><td>SYMBOL</td><td>MIN.</td><td>TYP.</td><td>MAX.</td><td>UNIT</td><td>MAKER</td></tr><tr><td>INPUT VOLTAGE</td><td>Vin</td><td>4.5</td><td>5</td><td>5.5</td><td>V</td><td rowspan="5">All value is base on Vin = 5V Load = 41K ohms → Ta = 25 °C</td></tr><tr><td>INPUT CURRENT</td><td>Iin</td><td>260</td><td>300</td><td>350</td><td>mA</td></tr><tr><td>OSCILLATION FREQUENCY</td><td>f</td><td>43.0</td><td>48.0</td><td>53.0</td><td>KHZ</td></tr><tr><td>OUTPUT CURRENT</td><td>Iout</td><td>4.3</td><td>5</td><td>5.7</td><td>mArms</td></tr><tr><td>OUTPUT OPEN VOLTAGE</td><td>Vopen</td><td>600</td><td>735</td><td>830</td><td>Vrms</td></tr><tr><td>OUTPUT LOAD VOLTAGE</td><td>Vload</td><td>—</td><td>240</td><td>—</td><td>Vrms</td><td></td></tr></table> <table><tr><td>ITEM</td><td>SYMBOL</td><td>MIN.</td><td>TYP.</td><td>MAX.</td><td>UNIT</td><td>MAKER</td></tr><tr><td>INPUT VOLTAGE</td><td>Vin</td><td>4.5</td><td>5</td><td>5.5</td><td>V</td><td rowspan="5">All value is base on Vin = 5V Load = 2.6Ø Tube Diameter 100mm Tube Length Ta = 25 °C</td></tr><tr><td>INPUT CURRENT</td><td>Iin</td><td>300</td><td>350</td><td>400</td><td>mA</td></tr><tr><td>OSCILLATION FREQUENCY</td><td>f</td><td>45.0</td><td>50.0</td><td>55.0</td><td>KHZ</td></tr><tr><td>OUTPUT CURRENT</td><td>Iout</td><td>4.3</td><td>5</td><td>5.7</td><td>mArms</td></tr><tr><td>OUTPUT OPEN VOLTAGE</td><td>Vopen</td><td>600</td><td>735</td><td>830</td><td>Vrms</td></tr><tr><td>OUTPUT LOAD VOLTAGE</td><td>Vload</td><td>250</td><td>300</td><td>350</td><td>Vrms</td><td></td></tr></table>		ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	MAKER	INPUT VOLTAGE	Vin	4.5	5	5.5	V	All value is base on Vin = 5V Load = 41K ohms → Ta = 25 °C	INPUT CURRENT	Iin	260	300	350	mA	OSCILLATION FREQUENCY	f	43.0	48.0	53.0	KHZ	OUTPUT CURRENT	Iout	4.3	5	5.7	mArms	OUTPUT OPEN VOLTAGE	Vopen	600	735	830	Vrms	OUTPUT LOAD VOLTAGE	Vload	—	240	—	Vrms		ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	MAKER	INPUT VOLTAGE	Vin	4.5	5	5.5	V	All value is base on Vin = 5V Load = 2.6Ø Tube Diameter 100mm Tube Length Ta = 25 °C	INPUT CURRENT	Iin	300	350	400	mA	OSCILLATION FREQUENCY	f	45.0	50.0	55.0	KHZ	OUTPUT CURRENT	Iout	4.3	5	5.7	mArms	OUTPUT OPEN VOLTAGE	Vopen	600	735	830	Vrms	OUTPUT LOAD VOLTAGE	Vload	250	300	350	Vrms	
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JUN.18,2002	1	<div>2. ELECTRICAL SPECIFICATION</div> <div>OUTPUT LOAD VOLTAGE : MIN. = 250 → 280 , MAX. = 350 → 320</div>																																																																																											

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1. FEATURE

1.1 LCM CCFL DRIVING INVERTER UNIT.

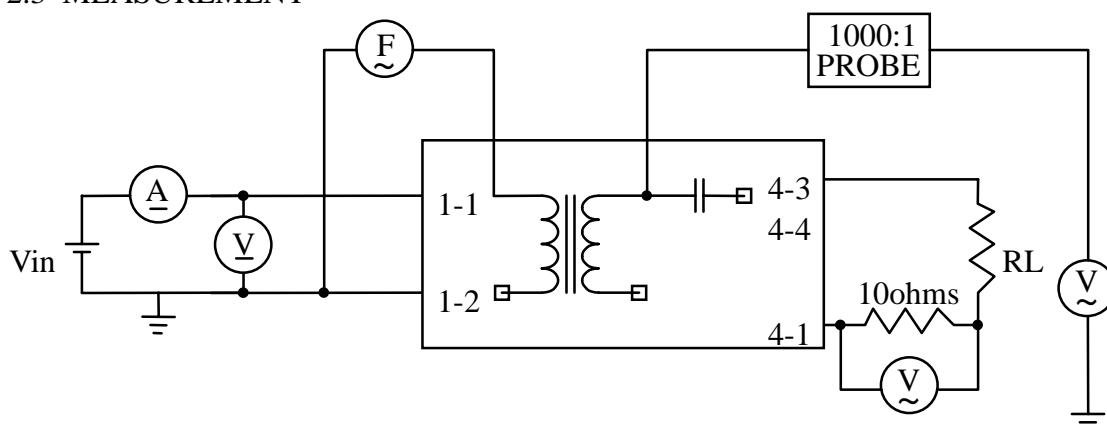
2. ELECTRICAL SPECIFICATION

2.1 OPERATION VOLTAGE : 4V~6V

2.2

ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT	MAKER
INPUT VOLTAGE	V _{in}	4.5	5	5.5	V	All value is base on V _{in} = 5V Load = 2.6 \varnothing Tube Diameter 100mm Tube Length T _a = 25 °C
INPUT CURRENT	I _{in}	300	350	400	mA	
OSCILLATION FREQUENCY	f	45.0	50.0	55.0	KHZ	
OUTPUT CURRENT	I _{out}	4.3	5	5.7	mA _{rms}	
OUTPUT OPEN VOLTAGE	V _{open}	600	735	830	V _{rms}	
OUTPUT LOAD VOLTAGE	V _{load}	280	300	320	V _{rms}	

2.3 MEASUREMENT



NOTE : The probe be connected to inverter when you want to measurement the output open voltage .

2.3.1 TEST EQUIPMENT

- (A) DC CURRENT METER
2011 (YEW) or equivalent
DIGITAL Mutil-Meter
- (V) GDM-8145(GW) or equivalent
- (V) RMS VOLTAGE METER
HP 3400B(HP).PROBE HP1137A(HP)
- (F) FREQUENCY COUNTER
1212(Topward) or equivalent

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3. INTERVACE SIGNALS

3.1 INPUT CONNECTOR : (JAE IL-S-2P-S2T2-EF)

PIN NO.	SIGNAL
JP1-1	Vin
JP1-2	GND

3.2 OUTPUT CONNECTOR : (JAE IL-G-4P-S3L2-E)

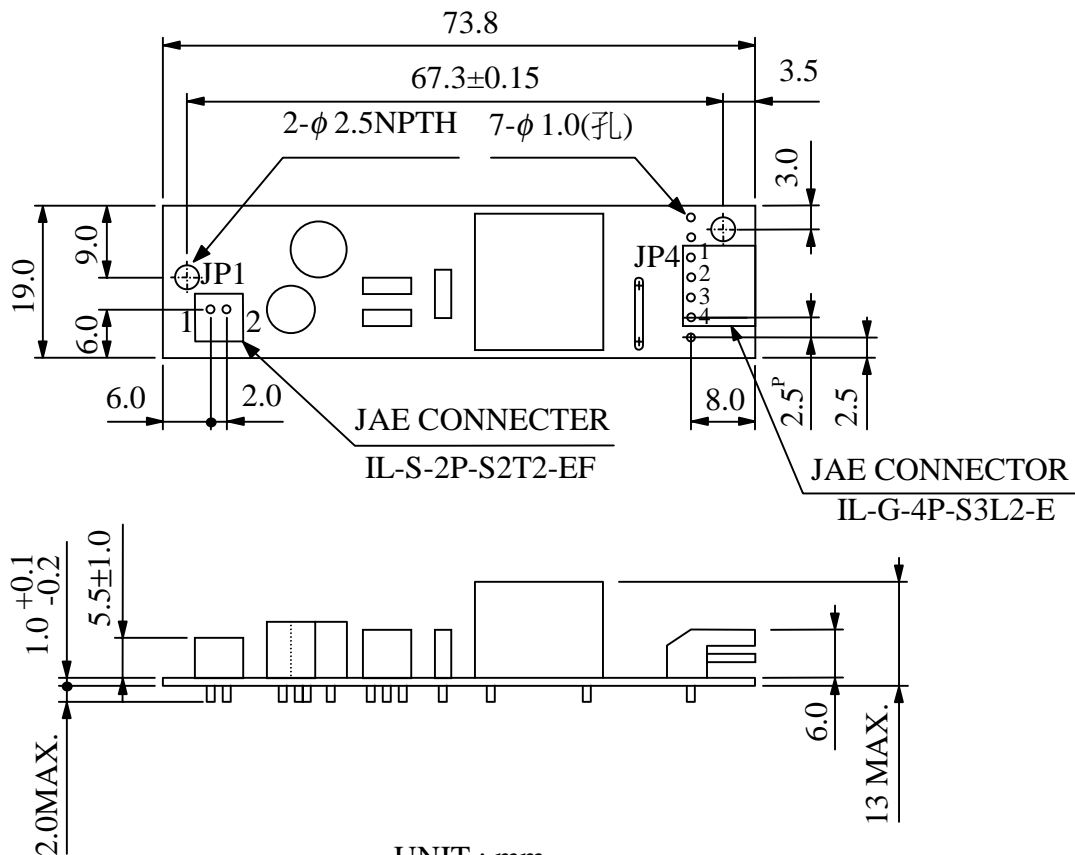
PIN NO.	SIGNAL	PIN NO.	SIGNAL
JP4-1	VL	JP4-3	VH
JP4-2	NC	JP4-4	VH

4. OPERATING ENVIRONMENT

OPERATING TEMPERATURE RANGE : -10 ~ 50°C Less than 95 % RH .

STORAGE TEMPERATURE RANGE : -20 ~ 80°C Less than 95 % RH .

5. DIMENSION



UNIT : mm

SCALE : NTS

NOT SPECIFIED TOLERANCE IS ± 0.5 mm