

**DESCRIPTION :**

This DC to AC Inverter was developed for large size LCD panel as Multiple Media , Replacement of CRT Monitor and other general Purpose.

**APPLICABLE LCD:**

- 10.4 to 15 inches Double lamps type
- Lamp Voltage 500~700V
- Lamp Current 6mA typ.



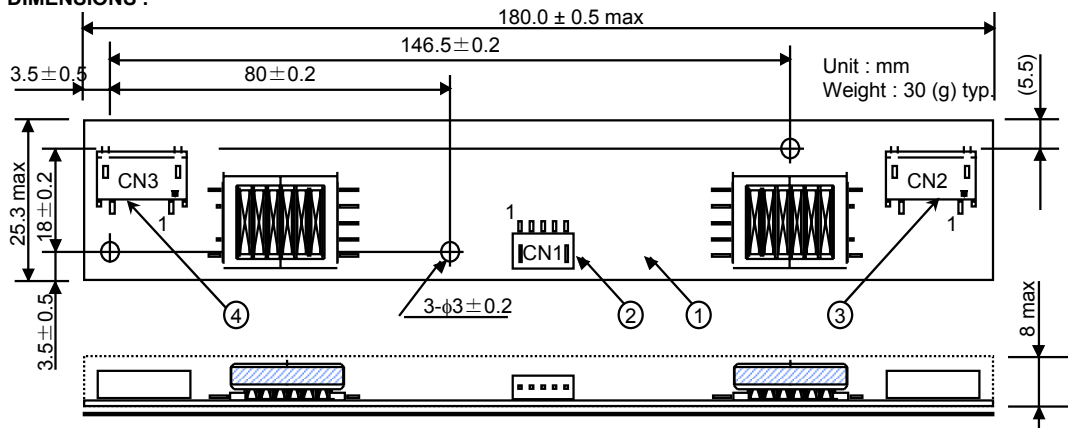
**FEATURES :**

- Wide Input Voltage
- Wide Dimming Range (By Internal PWM Control Circuit)
- Individual Lamp Current Feedback
- Same Mounting Hole Position (CXA-0217, CXA-P1212-VJL etc...)
- Low noise with voltage resonant circuit
- No High Voltage Pattern on Bottom Side
- High Efficiency
- 8mm Low Profile.
- Fuse Protection

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range 0° C ~ +70° C
- Storage Temperature Range -30° C ~ +85° C
- Humidity 95 %RH max

**DIMENSIONS :**

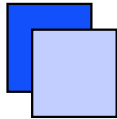


No.	Part Discription	Qty.	Material	Note
1	PWB	1	UL94V-0 (FR-4 or CEM-3)	t=1mm
2	Connector CN1	1	S5B-PH-SM3	JST
3	Connector CN2	1	SM02(8.0)B-BHS-1	JST
4	Connector CN3	1	SM02(8.0)B-BHS-1	JST

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**Input Side CN1:**

Pin No.	Symbols	Ratings
CN 1-1	Vin	9.6-14.4V
CN 1-2	GND	0V
CN 1-3	Vbr	0-1.5V
CN 1-4	-	N.C.
CN 1-5	Vrmt	0-0.4V OFF / 2-14.4V ON

**Output Side CN2:**

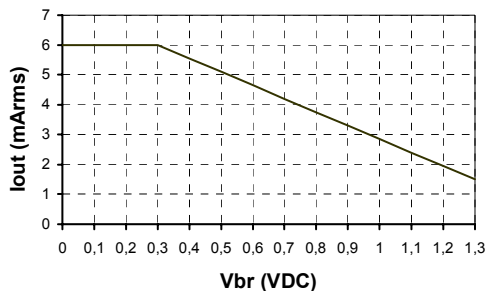
Pin No.	Symbols	Ratings
CN 2-1	VHIGH1	670 Vrms
CN 2-2	N.C.	-
CN 2-3	VLOW1	(2V)

**Output Side CN3:**

Pin No.	Symbols	Ratings
CN 3-1	VHIGH2	670 Vrms
CN 3-2	N.C.	-
CN 3-3	VLOW2	(2V)

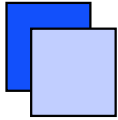
**ELECTRICAL CHARACTERISTICS :**

Items	Symbols	Condition					Specifications			Unit
		Vin (V)	Vrmt (V)	Vbr (V)	Ta (°C)	RL1 (KΩ) / RL2 (KΩ)	Min.	Typ.	Max.	
Output Current	Iout1/2	12±2.4	5±0.25	0	0~70	75~112	5.3	6.0	6.7	m Arms
		12±0.6	5±0.25	0	25±1.0	95±0.5	5.5	6.0	6.5	
Input Current 1	Iin1	12±2.4	5±0.25	0~1.5	0~70	75~112	-	-	1.6	A DC
		12±0.6	5±0.25	0~1.5	25±1.0	95±0.5	-	0.78	1.4	
Input Current 2	Iin2	12±2.4	0~0.4	0~1.5	0~70	75~112	-	-	1	mA DC
		12±0.6	0~0.4	0~1.5	25±1.0	95±0.5	-	-	1	
Frequency 1	F1	12±2.4	5±0.25	0	0~70	75~112	53	60	67	kHz
		12±0.6	5±0.25	0	25±1.0	95±0.5	54	60	66	
Frequency 2	F2	12±2.4	5±0.25	0	0~70	75~112	55	62	69	kHz
		12±0.6	5±0.25	0	25±1.0	95±0.5	56	62	68	
Frequency (Duty)	F3	12±2.4	5±0.25	1.0±0.05	0~70	75~112	225	270	335	Hz
		12±0.6	5±0.25	1.0±0.05	25±1.0	95±0.5	225	270	315	
Open Circuit Voltage	Vopen	12±2.4	5±0.25	0	0~70	∞	1500	1700	-	Vrms
		12±0.6	5±0.25	0	25±1.0	∞	1500	1700	-	
Dimming Function	Iout1/2	12±2.4	5±0.25	1.3±0.05	0~70	75~112	0.4	1.5	2.6	m Arms
		12±0.6	5±0.25	1.3±0.05	25±1.0	95±0.5	0.6	1.5	2.4	
Dimming Function (Note 8)	Iout1/2	12±2.4	5±0.25	1.7±0.05	0~70	75~112	-	-	0	m Arms
		12±0.6	5±0.25	1.5±0.05	25±1.0	95±0.5	-	-	0	

**DIMMING CHARACTERISTICS (Reference)**

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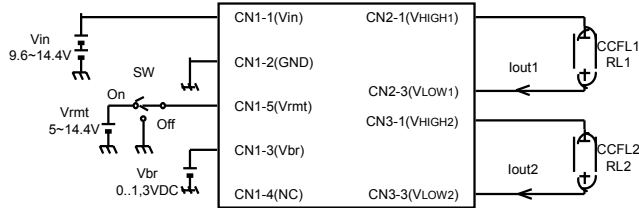
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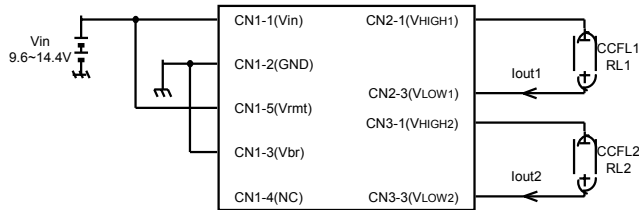


**APPLICATION (for example)**

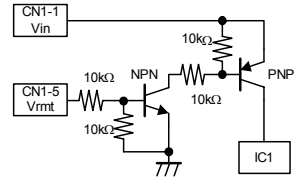
**Voltage Dimming Type**



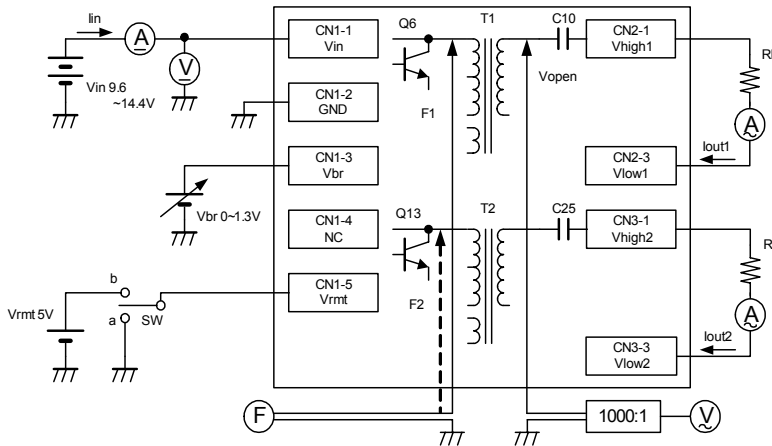
**None Dimming Type**



**REMOTE TERMINAL CIRCUIT (Reference)**



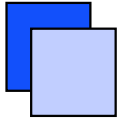
**TEST CIRCUIT**



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- Note 1. For circuit connection, please refer to test circuit diagram
- Note 2. Please use minimum of 2mm clearance (all directions) between inverter high voltage area and any conductors. Please refer to mechanical drawing for marking of high voltage area.
- Note 3. Open voltage (strike voltage) is measured across the transformer secondary winding at no load as the reading at the output connector would be less than the actual value
- Note 4. If the start voltage falls below Cold Cathode Tube strike voltage, the CCFL will not light up easily specially at lower ambient temperature. Please review mounting instruction to avoid any abnormal operation due to coupling/leakage capacitance of inverter high voltage area to any surrounding conductor.
- Note 5. Please check your lamp characteristic for minimum operational current and set the limit point in your design to avoid flickering and/or abnormal operation.
- Note 6. For proper operation of circuit protection (FUSE or IC PROTECTOR), please use minimum of 2A capacity for input power supply.
- Note 7. The recommendation range of  $V_{br}$  is 0 to 1.3V and normal dimming range is 1.3 to 1.5V. However each lamp has different characteristics, therefore care must be taken to check brightness with using lamp and DC to AC Inverter units combination to avoid flickering or other problems.

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