

# DC-AC INVERTER UNIT

**CXA-L0624-VJL (4.0W SINGLE OUTPUT WITH DIMMING FUNCTION)**

(PRELIMINARY, STANDARD)

**DESCRIPTION :**

This DC to AC Inverter was developed for notebook computer and many other low LCD Backlight power supply as low profile applications, either for Note Book PC or Industrial.

**APPLICABLE LCD:**

- 10 to 12 inches single lamp type
- Lamp Voltage 600V
- Lamp Current 6mA



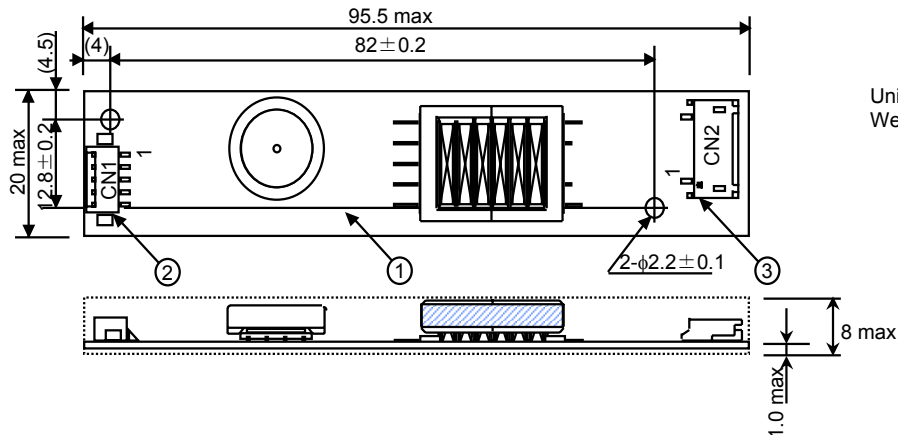
**FEATURES :**

- Current Feedback Circuit
- High Efficiency
- Low noise with voltage resonant circuit
- Regulated output current

**TEMPERATURE & HUMDITY :**

- Operating Temperature Range      0° C ~ +60° C
- Storage Temperature Range        -30° C ~ +85° C
- Humidity                                    95 %RH max

**DIMENSIONS :**



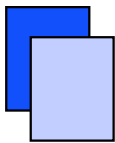
Unit : mm  
Weight : 13.7 (g) typ.

No.	Part Discription	Qty.	Material	Note
1	PCB	1	UL94V-0 ( CEM-3)	t=1.0mm
2	Connector CN1	1	53261-0590	Molex
3	Connector CN2	1	SM02(8.0)B-BHS-1	JST

**Power Systems – The Power Solution**

Web: [www.Power-Systems.de](http://www.Power-Systems.de)  
Email: [Info@Power-Systems.de](mailto:Info@Power-Systems.de)

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**Input Side CN1:**

Pin No.	Symbols	Ratings
CN 1-1	Vin	20~28V
CN 1-2	GND	0V
CN 1-3	Vrmt	2.5~Vin (Active High) 0~0.5V
CN 1-4	Vbr	0~3V
CN 1-5	N.C.	-

**Output Side CN2:**

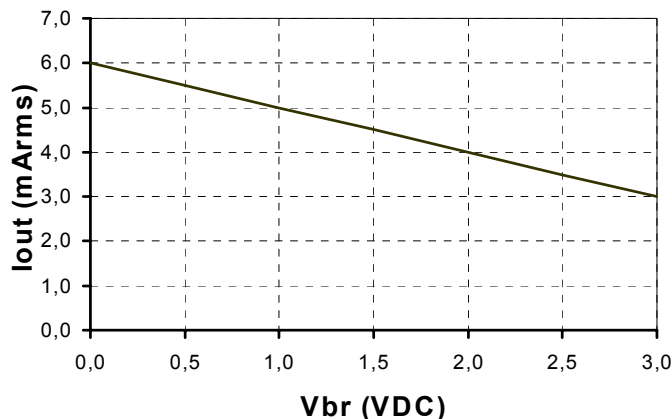
Pin No.	Symbols	Ratings
CN 2-1	VHIGH	600Vrms
CN 2-2	N.C.	-
CN 2-3	VLOW	(2V)

**ELECTRICAL CHARACTERISTICS:**

Items	Symbols	Conditions				Specification			Unit
		Vin [V]	Vbr [V]	Ta [°C]	RL [KΩ]	Min.	Typ.	Max.	
Output Current	lout1	20~28	0	0~60	90~110	5.4	6	6.6	mArms
	lout2	24		23±5	100				
	lout3	20~28	3		226	2.7	3	3.3	
Input Current	lin	24	0	0~60	90~110	-	200	250	mA DC
Frequency	F	20~28	0	0~60	90~110	35	45	55	kHz
Open Circuit Voltage	Vopen	20~28	0	0~60	∞	1400	1500	-	Vrms
Output Power	Pout	20~28	0	0~60	90~110	-	-	4	W

**DIMMING CHARACTERISTICS**

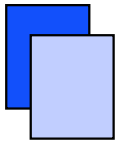
(Reference):



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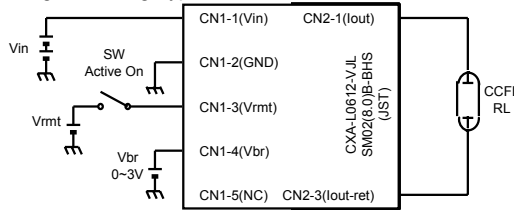
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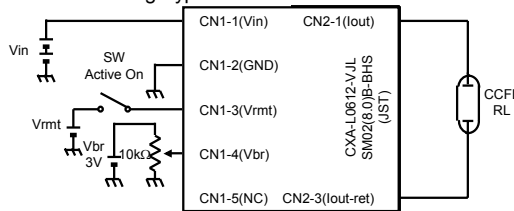


### APPLICATION (for example)

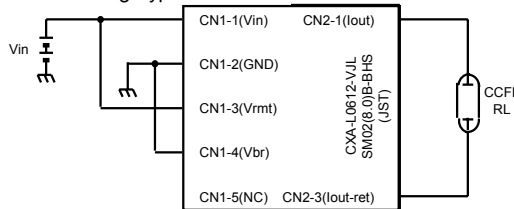
#### Voltage Dimming Type



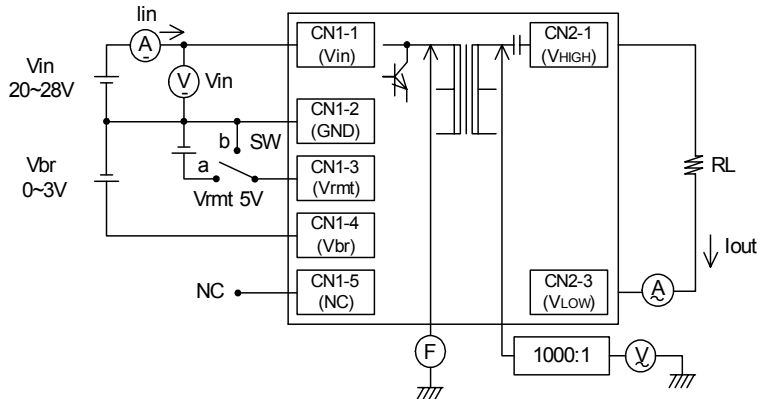
#### Resistor Dimming Type



#### None Dimming Type



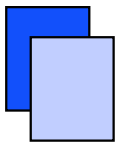
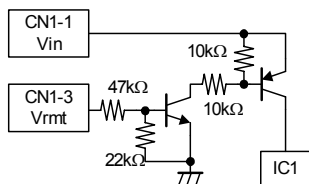
### TEST CIRCUIT:



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**REMOTE TERMINAL CIRCUIT (Reference):**

- 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 up 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 1A capacity for input power supply.

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