

# DC-AC INVERTER UNIT

**CXA-L05XX-NJL SERIES (3.0W SINGLE OUTPUT)**

(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:**

- 6 to 10 inches single lamp type
- Lamp Voltage 600V
- Lamp Current 5mA



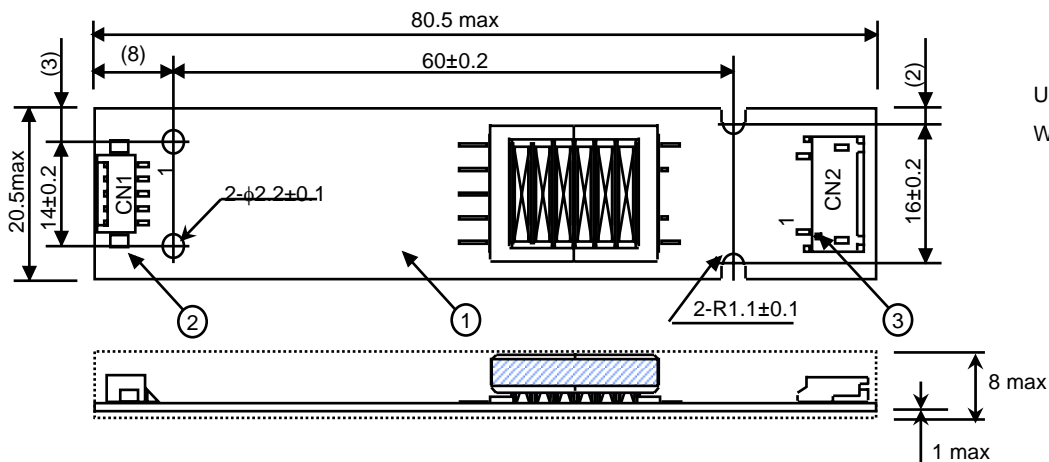
**FEATURES :**

- High Efficiency (85%)
- Fuse protection
- High Efficiency
- Low noise with voltage resonant circuit

**TEMPERATURE & HUMIDITY :**

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

**DIMENSIONS :**



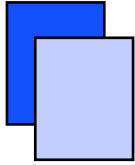
Unit: mm  
Weight: 11.0g typ.

No.	Part Discription	Qty.	Material	Note
1	PCB	1	UL94V-0 (FR-4 or 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**

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**Input Side CN1:**

Pin No.	Symbols	Ratings		
		CXA-L0505-NJL	CXA-L0512-NJL	CXA-L0524-NJL
CN 1-1	Vin	5V	12V	24V
CN 1-2	GND	0V	0V	0V
CN 1-3	N.C.	-	-	-
CN 1-4				
CN 1-5				

**Output Side CN2:**

Pin No.	Symbols	Ratings
CN 2-1	VHIGH	600 Vrms
CN 2-2	N.C.	-
CN 2-3	VLOW	(0V)

**ELECTRICAL CHARACTERISTICS:**

CXA-L0505-NJL

Items	Symbols	Conditions			Specification			Unit
		Vin (V)	Ta (°C)	RL (KΩ)	Min.	Typ.	Max.	
Output Current	Iout1	5±0.05	18~28	120	4.5	5.0	5.5	mArms
	Iout2				4.0	5.0	6.0	
Input Current	Iin	5±0.25	0~60	110~130	-	720	1000	mA DC
Frequency	F				33	40	47	kHz
Open Circuit Voltage	Vopen			∞	1400	1500	-	Vrms

CXA-L0512-NJL

Items	Symbols	Conditions			Specification			Unit
		Vin (V)	Ta (°C)	RL (KΩ)	Min.	Typ.	Max.	
Output Current	Iout1	12±0.12	18~28	120	4.5	5.0	5.5	mArms
	Iout2				4.0	5.0	6.0	
Input Current	Iin	12±0.6	0~60	110~130	-	300	500	mA DC
Frequency	F				33	40	47	kHz
Open Circuit Voltage	Vopen			∞	1400	1500	-	Vrms

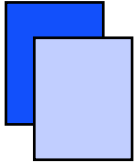
CXA-L0524-NJL

Items	Symbols	Conditions			Specification			Unit
		Vin (V)	Ta (°C)	RL (KΩ)	Min.	Typ.	Max.	
Output Current	Iout1	24±0.24	18~28	120	4.5	5.0	5.5	mArms
	Iout2				4.0	5.0	6.0	
Input Current	Iin	24±1.2	0~60	110~130	-	150	250	mA DC
Frequency	F				26	32	38	kHz
Open Circuit Voltage	Vopen			∞	1400	1500	-	Vrms

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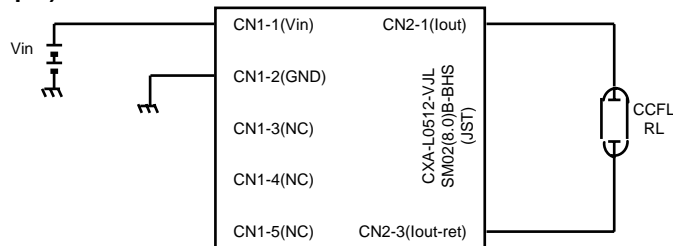
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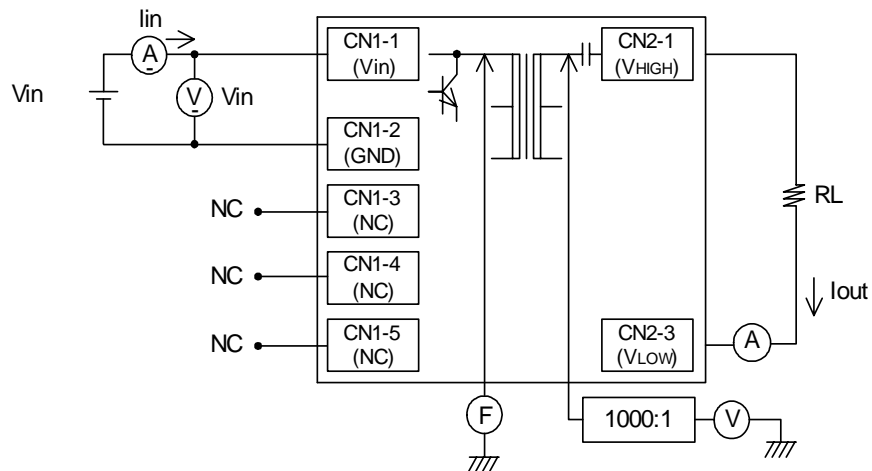
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## APPLICATION (for example)

None Dimming Type



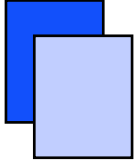
## TEST CIRCUIT:



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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 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. For operation in non-isolated configuration, please connect CN2-3 (V-Low) to input return (GND) as the output of DC/AC inverter is electrically isolated from input.
- Note 6. For proper operation of circuit protection (FUSE or IC PROTECTOR) of CXA-L0505-NJL, please use minimum of 2A capacity for input power supply and 1A for CXA-L0512-NJL and CXA-L0524-NJL..

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