

CXA-0320 (5W DUAL OUTPUTS WITH DIMMING FUNCTION)

DESCRIPTION :

This low profile DC to AC Inverter is developed for dual lamps, low power LCD back-light. Application includes industrial PC and LCD monitor.

Applicable LCD; NL3224BC35-20 (NEC 5.5 inch dual lamp type)
 Lamp Voltage 340Vrms
 Lamp Current 5mArms
 Lamp Start Up Voltage 1250Vrms

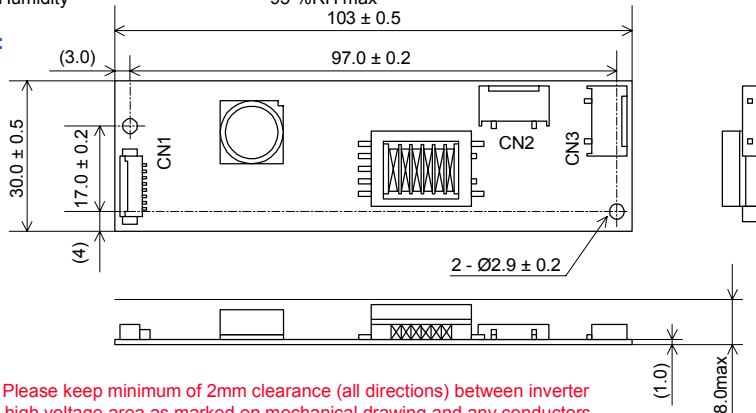
FEATURES :

- Wide operating temperature range
- Alarm signal function
- PWM dimming type.
- Silicon Coating in High Voltage area

TEMPERATURE & HUMIDITY :

Operating Temperature Range -10 °C ~ +70 °C
 Storage Temperature Range -30 °C ~ +85 °C
 Humidity 95 %RH max

DIMENSIONS :



Unit : mm
 Weight :25 (g) typ.

Note 1 : Please keep minimum of 2mm clearance (all directions) between inverter high voltage area as marked on mechanical drawing and any conductors.

No.	Part Description	Qty.	Note
1	PWB	1	UL94V-0 t=1.0mm
2	Connector CN1	1	53261-0890 (Molex)
3	Connector CN2 , CN3	2	SM02(8.0)B-BHS-1 (JST)

CN1 : 53261-0890 (Molex)

Pin	Symbol	Note
CN1-1		
CN1-2	Vin	10.8 ~ 13.2V
CN1-3		
CN1-4	GND	0 V
CN1-5	Vrmt	0 ~ 0.4V : OFF 2.5V ~ Vin : ON
CN1-6	Vbr1 / Rbr1	0 ~ 2.5V / 0 ~ 50kΩ
CN1-7	Vbr2 / Rbr2	GND / 0 ~ 50kΩ
CN1-8	Vst ^{*1}	0V / 5V

CN2 : SM02(8.0)B-BHS-1 (JST)

Pin	Symbol	Note
CN2-1	Vhigh1	340Vrms / 5mArms
CN2-2	N.C.	-
CN2-3	Vlow1	(2V)

CN3 : SM02(8.0)B-BHS-1 (JST)

Pin	Symbol	Note
CN3-1	Vhigh2	340Vrms / 5mArms
CN3-2	N.C.	-
CN3-3	Vlow2	(2V)

***1.** This is an output pin and it is active high (+5V) if any Lamp opens / fails

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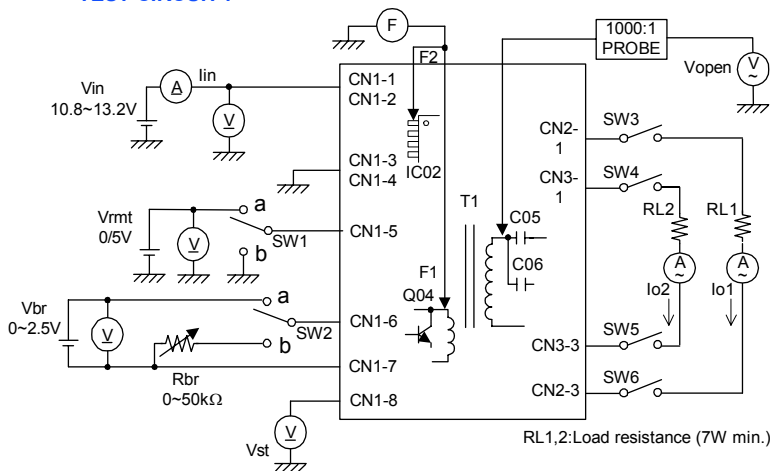
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ELECTRICAL CHARACTERISTICS :

Parameters	Symbol	Conditions				Specifications			Unit	Note	
		Vin (V)	Vrmt (V)	Vbr (V)	Ta (°C)	min.	typ.	max.			
Output Current	Iout1 / Iout2	12	5	0	23 ± 5	63	4.5	5.0	5.5	mArms	Max Brightness.
		12	5	3	23 ± 5	63	1.7	2.2	2.7	mArms	Min Brightness.
Input Current 1	Iin1	12	5	0	23 ± 5	63	-	0.40	0.75	A _{dc}	
Input Current 2	Iin2	12	0	0	23 ± 5	63	-	-	1	mA _{dc}	
Frequency	F1	12	5	0	23 ± 5	63	39	43	47	kHz	
Frequency (Duty)	F2	12	5	3	23 ± 5	63	300	330	360	Hz	
Open Voltage	Vopen	12	5	0	23 ± 5	∞	1200	1250	1500	V _{rms}	
		12	5	0	23 ± 5	∞	4.5	5.0	5.5	V _{dc}	RL2 open
Alarm Signal (Note 4)	Vst	12	5	0	23 ± 5	∞	4.5	5.0	5.5	V _{dc}	RL1 open
		12	5	0	23 ± 5	63	-	0	0.5	V _{dc}	Normal

TEST CIRCUIT :



Vbr=0V :brightness max.
Rbr=0Ω :brightness max.

SW1	Operation of unit
a	Operation
b	Non operation
OPEN	Non operation

SW2	Operation of unit
a	Voltage Dimming Vbr=0~2.5V
b	Variable resistance Dimming Rbr=0~50kΩ

SW3-6	Operation of warning signal
Open	Operation(5V Output)
Close	Non operation(0V Output)

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