

CXA-0317 (18W QUAD OUTPUTS WITH DIMMING FUNCTION)

DESCRIPTION :

This low profile DC to AC Inverter is developed for quad lamps LCD back-light.
Application includes LCD Monitor and Industrial PC.

Applicable LCD; 15 inch quad lamp type
Lamp Voltage 660Vrms
Lamp Current 7mA rms
Lamp Start Up Voltage 1600Vrms (Vin : 12V)

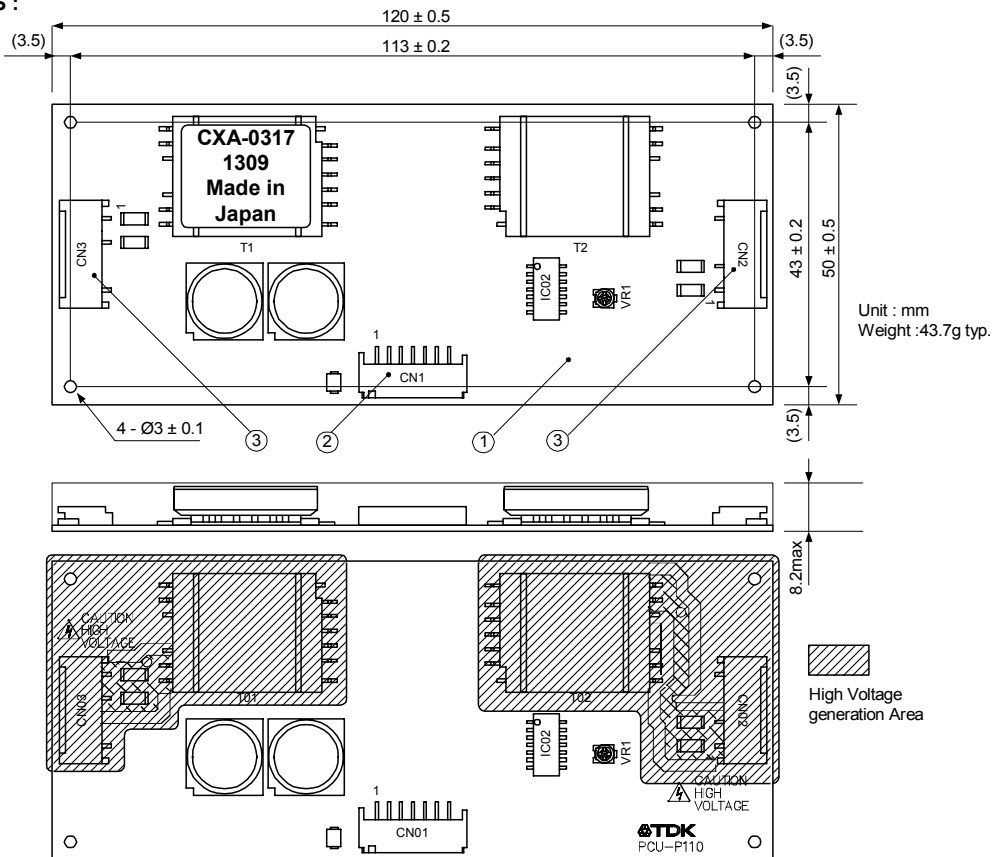
FEATURES :

- PWM dimming
- Current Feedback Circuit
- Regulated output current
- Silicon coating in High Voltage area

TEMPERATURE & HUMIDITY :

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

DIMENSIONS :



Note : Please use minimum of 2mm clearance (all directions) between inverter high voltage area (as marked above) and any conductors.

Power Systems – The Power Solution

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No.	Part Description	Qty.	Note	
1	PWB	1	UL94V-0	t=1.0mm
2	Connector CN1	1	S7B-PH-SM3	(JST)
3	Connector CN2,CN3	2	SM03(7-D1)B-BHS-1	(JST)

CN1 : S7B-PH-SM3 (JST)

Pin	Symbol	Note
CN1-1	Vin	10.8 ~ 13.2V
CN1-2		
CN1-3	GND	0 V
CN1-4		
CN1-5	Vbr	0 ~ 2.5V
CN1-6	N.C.	-
CN1-7	Vrmt	0 ~ 0.4V : OFF 2.5V ~ Vin : ON

CN2 : SM03(7-D1)B-BHS-1 (JST)

Pin	Symbol	Note
CN2-1	Vhigh1	660Vrms (7mArms)
CN2-2	Vhigh2	660Vrms (7mArms)
CN2-3	N.C	-
CN2-4	Vlow1	(0.6V)

CN3 : SM03(7-D1)B-BHS-1 (JST)

Pin	Symbol	Note
CN3-1	Vhigh3	660Vrms (7mArms)
CN3-2	Vhigh4	660Vrms (7mArms)
CN3-3	N.C	-
CN3-4	Vlow2	(0.6V)

ELECTRICAL CHARACTERISTICS :

Parameters	Symbol	Conditions					Specifications			Unit	Note
		Vin (V)	Vrmt (V)	Vbr (V)	Ta (°C)	RL (kΩ)	min.	typ.	max.		
Output Current	Iout1 / Iout2	10.8	5 ± 0.05	0	23 ± 5	90	12.6	14.0	15.4	mArms	Max Brightness.
		12	5 ± 0.05	0	23 ± 5	90	12.6	14.0	15.4	mArms	
		13.2	5 ± 0.05	0	23 ± 5	90	12.6	14.0	15.4	mArms	
		12	5 ± 0.05	2.5 ± 0.05	23 ± 5	90	5	6.25	7.5	mArms	Min Brightness.
Input Current	Iin	10.8	5 ± 0.05	0	23 ± 5	90	-	1.75	2.5	Adc	
Frequency	FL	12	5 ± 0.05	0	23 ± 5	90	50	55	60	kHz	
Frequency (Duty)	Fduty	12	5 ± 0.05	0	23 ± 5	90	263	269	275	Hz	Ajust by VR1
Open Voltage	Vopen	10.8	5 ± 0.05	0	23 ± 5	∞	1500	1600	-	Vrms	

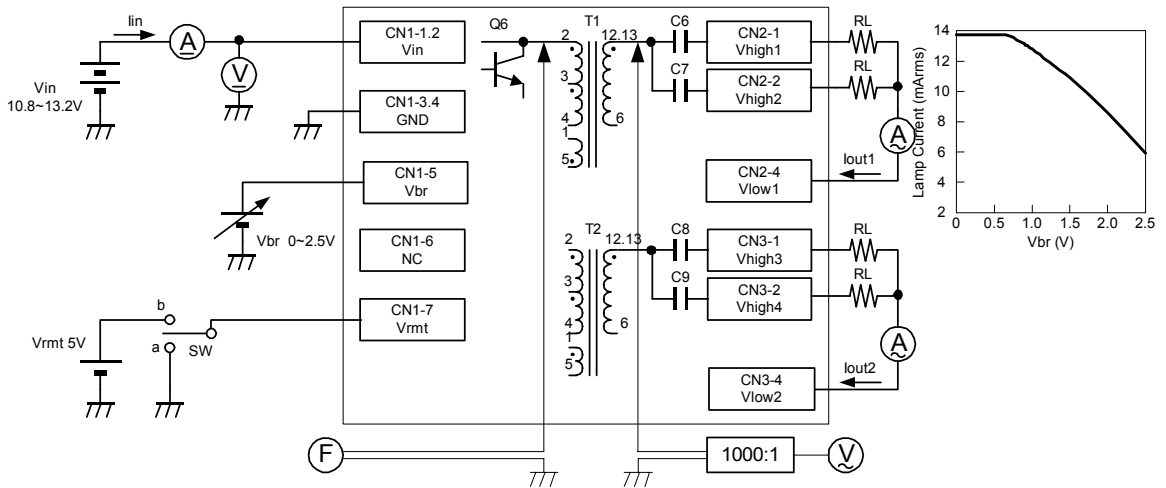
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TEST CIRCUIT :



SW	Unit Operation
a	0-0.8V
	Open
b	2.5-14.4V

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