TDK·Lambda

DC-AC INVERTER UNIT

CXA-0385 (16 W QUAD OUTPUTS WITH DIMMING FUNCTION) (PRELIMINARY INFORMATION)

DESCRIPTION :

This low profile DC to AC Inverter is developed for Quad lamps, low power LCD back-light.

APPLICABLE LCD:

AA150XN02 (MITSUBISHI)
AA150XN03 (MITSUBISHI)
AA150XN04 (MITSUBISHI)
T-351863D150-FW-A-AB (OPTREX)
6.4 to 15 inches Quad lamp type
Lamp Voltage 600 Vrms
Lamp Current 6.5 mArms
Lamp Start Up Voltage 1.600 Vrms (Vin : 12.0 Vdc)

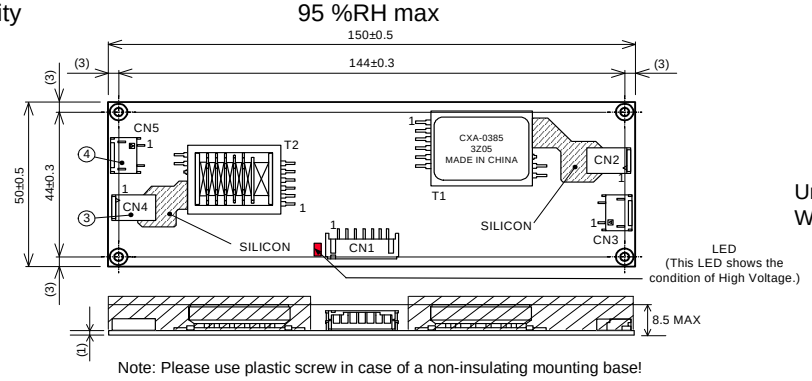
FEATURES :

Dimming function PWM
Remote ON/OFF
Open Lamp Detection

TEMPERATURE & HUMDITY :

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

DIMENSIONS :



Unit : mm
Weight :43 (g) typ.

Note: Please use plastic screw in case of a non-insulating mounting base!

Components

No.	Part Discription	Qty.	Material	Note
1	PWB	1	Conposite (CEM-3)	t=1mm
2	Connector CN1	1	S7B-PH-SM3	JST or equal
3	Connector CN2/CN4	2	SM02B-BHSS-1-TB	JST or equal
4	Connector CN3/CN5	2	SM02(4.0)B-BHS-1-TB	JST or equal

Input side CN1:

Pin No.	Symbols	Ratings
CN 1-1~2	Vin	10.8 ~ 13.2 Vdc
CN 1-3~4	GND	
CN 1-5	Vbr / Rbr	0 ~ 2.5 Vdc / 0 ~ 50 kΩ
CN 1-6	Vst	0 / 5.0 Vdc
CN 1-7	Vrmt	0 ~ 0.4 Vdc: Off 2.5 ~ Vin: On

Output side CN2/CN4

Pin No.	Symbols	Ratings
CN 2-1	Vhigh1	600 Vrms (6.5 mArms)
CN 2-2	Vhigh2	600 Vrms (6.5 mArms)

Output side CN3/CN5

Pin No.	Symbols	Ratings
CN 3-1	Vlow1	(GND)
CN 3-2	Vlow2	(GND)

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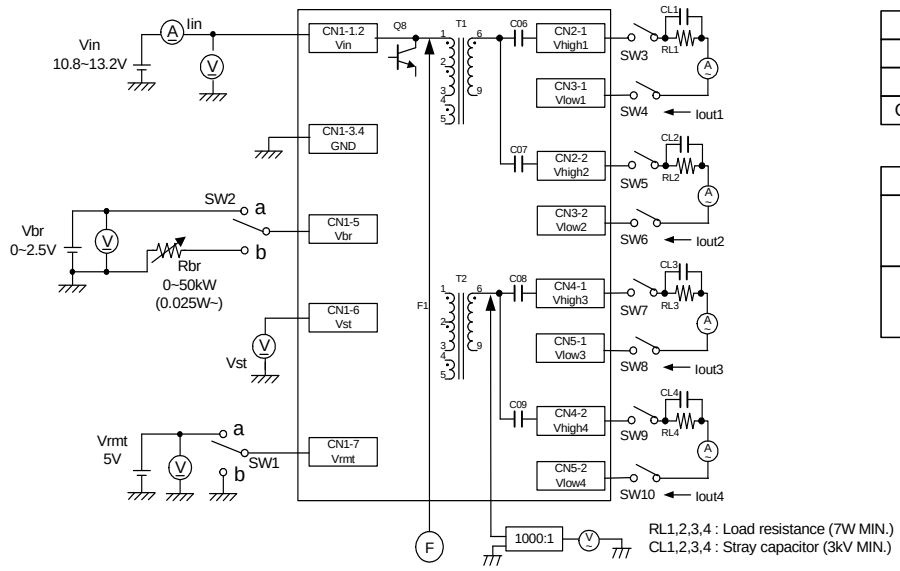
ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions				Specification			Unit	Note
		Vin (V)	Vrmt (V)	Vbr (V)	Tu (℃)	Min.	Typ.	Max.		
Output Current	Iout1	12.0±1.2	5±0.25	0	0 ~ +70	6.0	6.5	7.0	mArms	Max
Output Current	Iout2	12.0±1.2	5±0.25	2.5	0 ~ +70	2.3	3.0	3.7	mArms	Max
Input Current	Iin1	12.0±1.2	5±0.25	0	0 ~ +70	-	1.7	2.0	Adc	
Input Current	Iin2	12.0±1.2	0	0 ~ 2.5	0 ~ +70	-	-	1	mAdc	Remote Off
Frequency	F1	12.0±1.2	5±0.25	0	0 ~ +70	45	50	55	kHz	
Frequency (Duty)	F2	12.0±1.2	5±0.25	2.5	0 ~ +70	240	270	300	Hz	
Open Circuit Voltage	Vopen	12.0±1.2	5±0.25	0	0 ~ +70	1.500	1.600	-	kVrms	
Alarm Signal	Vst	12.0±1.2	5±0.25	0	0 ~ +70	-	0.0	-	Vdc	Normal
		12.0±1.2	5±0.25	0 ~ 2.5	0 ~ +70	4.5	5.0	5.5	Vdc	operation Alarm Signal

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

TEST CIRCUIT :



SW1	Operation of Unit
a	Operation
b	Non Operation
OPEN	Non Operation

SW2	Operation of Unit
a	Voltage dimming Vbr=0~2.5V (Vbr=0V : Max Brightness)
b	Variable resistance dimming Rbr=0~50kΩ (Rbr=0Ω : Max Brightness)

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