

DC-AC INVERTER UNIT

PS-DA0288-01-x (S) (8 W DUAL OUTPUTS)

(PRELIMINARY INFORMATION)

DESCRIPTION :

This low profile DC to AC Inverter is developed for dual lamps. Many different output connector possibilities will make this Backlight Inverter so flexible.

APPLICABLE LCD:

5.7 to 12 inches double lamp type
Lamp Voltage 600 Vrms
Lamp Current 2 x 5 mArms
Lamp Start Up Voltage 1.500 Vrms (Vin : 12 Vdc)



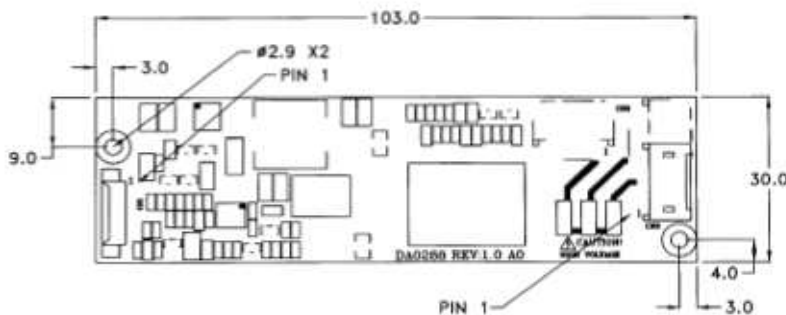
FEATURES :

Remote ON/OFF
Dimming with analogue voltage or by resistor dimming
RoHS compliant (S)
Alarm-signal-function
Different models (see order key)

TEMPERATURE & HUMIDITY :

Operating Temperature Range -10°C ~ +60°C
Storage Temperature Range -20°C ~ +85°C
Humidity 95 %RH max

DIMENSIONS : L x W x H 103 x 30 x 9 mm



Unit : mm
Weight :20 (g) typ.

Components

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (CEM-3)	t=1.0mm
2	Connector CN1	1	53261-0890	MOLEX
3	Connector CN3	1	SM03(4.0)B-BHS-1-TB	JST or equal

Input side CN1:

Pin No.	Symbols	Ratings
CN 1-1	Vin	10.8 ~ 13.2V
CN 1-2		
CN 1-3	GND	0 V
CN 1-4		
CN 1-5	Vrmt	0~0.4V=OFF / 2.5V~Vin=ON
CN 1-6	Vbr/Rbr	0~2.5V / 0~50kΩ
CN 1-7	Vbr/GND	0 ~ 50kΩ
CN 1-8	Vst	0V / 5V (Note 3)

Output side CN3:

Pin No.	Symbols	Ratings
CN 3-1	Vlow	0 Vdc
CN 3-2	Vhigh	600Vrms
CN 3-3	Vhigh	600Vrms

Power Systems – The Power Solution

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ELECTRICAL CHARACTERISTICS :

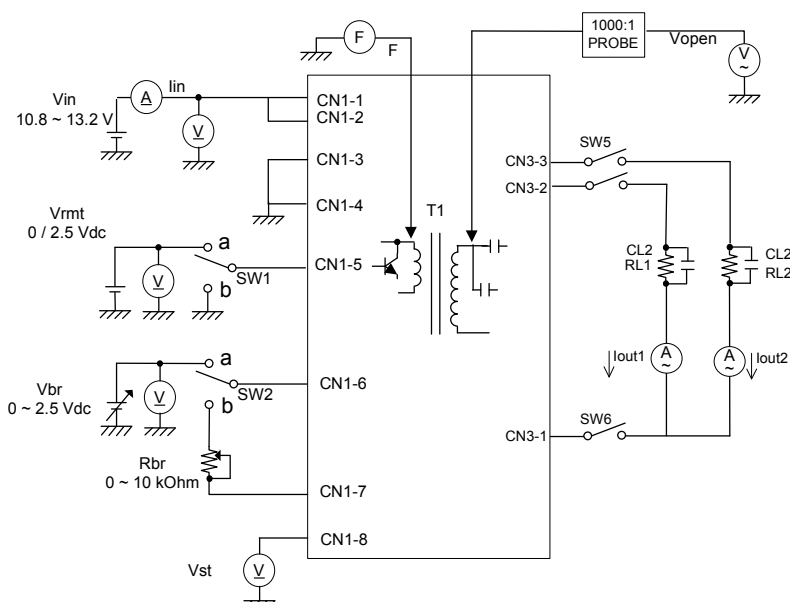
Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current (Brightness max.)	Iout1/2	12±0.05	5±0.25	-10~+60	4.5	5.0	5.5	mArms	
Output Current (Brightness min.)	Iout1/2	12±0.5	2.5	-10~+60	1.9	2.25	2.6	mArms	Vbr = 2.5 Vdc
Input Current	Iin	12±0.5	5±0.25	-10~+60	-	0.73	1.0	A	Vin 12V
Frequency	F	12±0.5	5±0.25	-10~+60	37.5	45.0	52.5	kHz	
Open Circuit Voltage	Vopen	11.4 min.	5±0.25	-10~+60	1.300	1.500	1700	Vrms	
Shutdown		12±0.5	5±	-10~+60	-	1	-	Sec.	

- Note 1 : Please keep minimum of 2mm clearance (all directions) between inverter high voltage area as marked on mechanical drawing and any conductors.
- Note 2 : Before apply any control signal into inverter, please provide Vcc first. Please follow the reversed sequence during power off. Power off control signal first, then power off Vcc.
- Note 3 : This is an output pin and it is active high (+5V) if any Lamp opens / fails.

TEST CIRCUIT :

PS-DA0288-03-3

SW1	Operation of unit
a	Operation
b	Non operation



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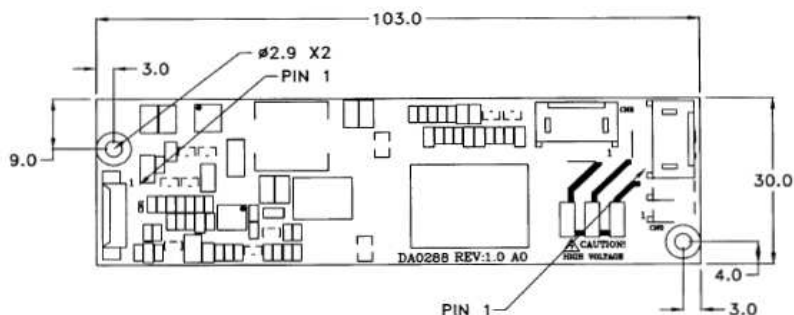
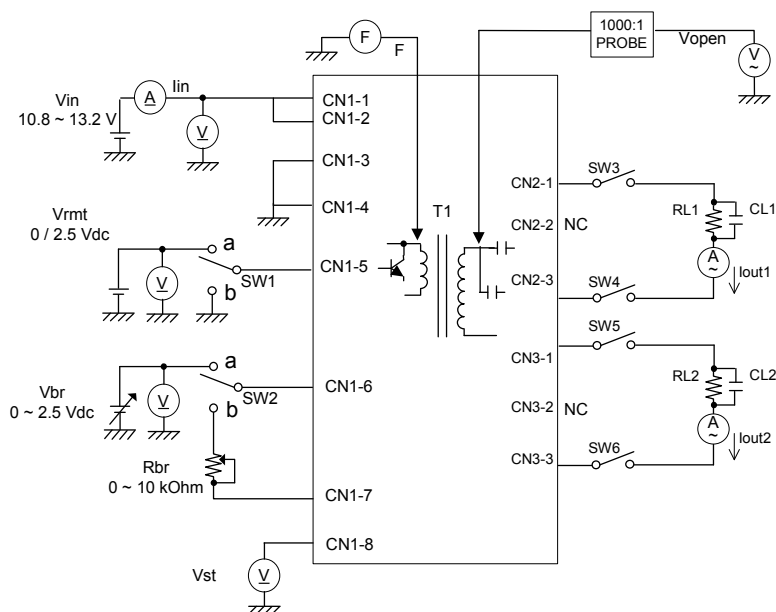
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Model	Connector	Pinning	Vin	Connector	Pinning	
					CN2	CN3
DA0288-01- 1	2x SM02(8.0)	1=H, 2=N.C, 3=L	12V	CN2+CN3	1;3	1;3
DA0288-01- 2	2x SM02 B-BHSS	1=H, 2=L	12V	CN2+CN3	1;2	3;4
DA0288-01- 3	1x SM03(4.0)	1=L, 2+3=H	12V	CN3		1;2;3
DA0288-01- 4	1x SM03(4.0)	1+2=H, 3=L	12V	CN3		2;3;4
DA0288-01- 5	1x SM04(4.0)	1+2=H, 3=N.C, 4=L	12V	CN3		1;2;3;4

PS-DA0288-01-1



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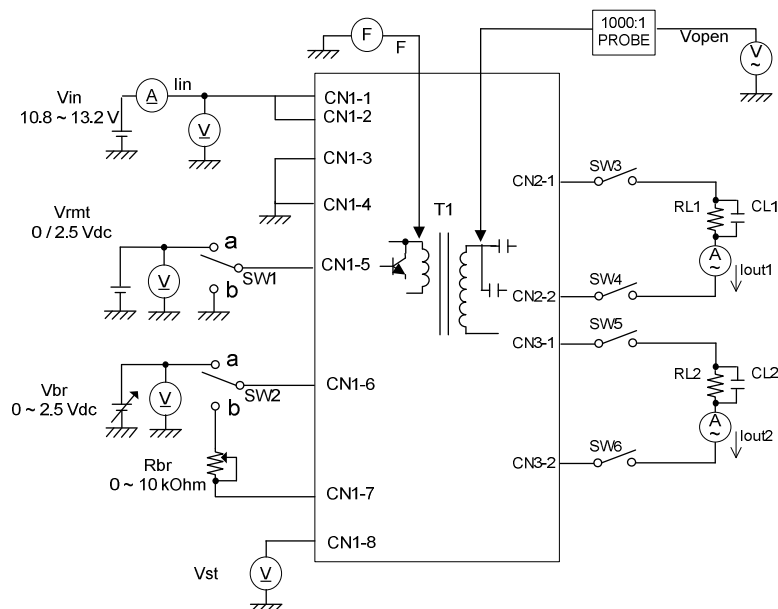
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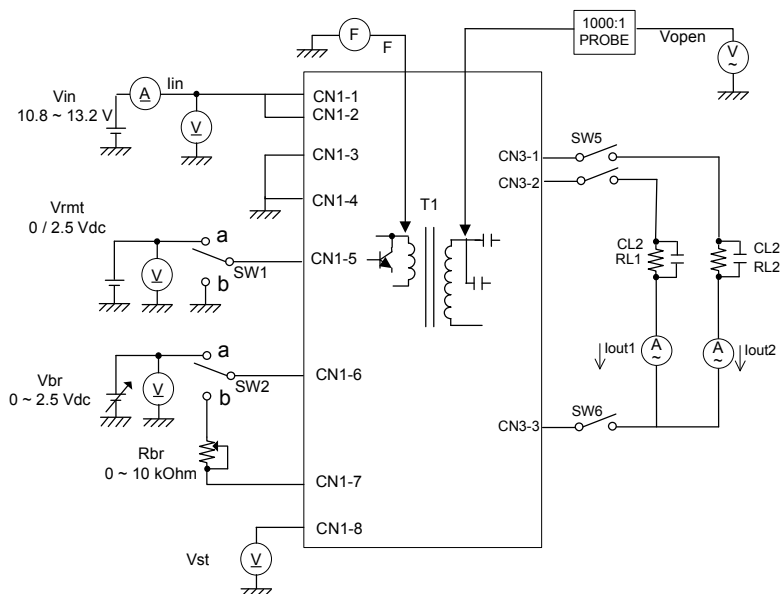
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PS-DA0288-01-2



PS-DA0288-01-4



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