

PS-DA0130-01(S) (4 W SINGLE OUTPUT)

(PRELIMINARY INFORMATION)

DESCRIPTION :

This low profile DC to AC Inverter is developed for single lamps.



INPUT VOLTAGE:

12 Vdc

APPLICABLE LCD:

- 3.6 to 10 inches single lamp type
- Lamp Voltage 800 Vrms
- Lamp Current 5.0 mArms
- Lamp Start Up Voltage 1.200 Vrms (Vin : 12 Vdc)

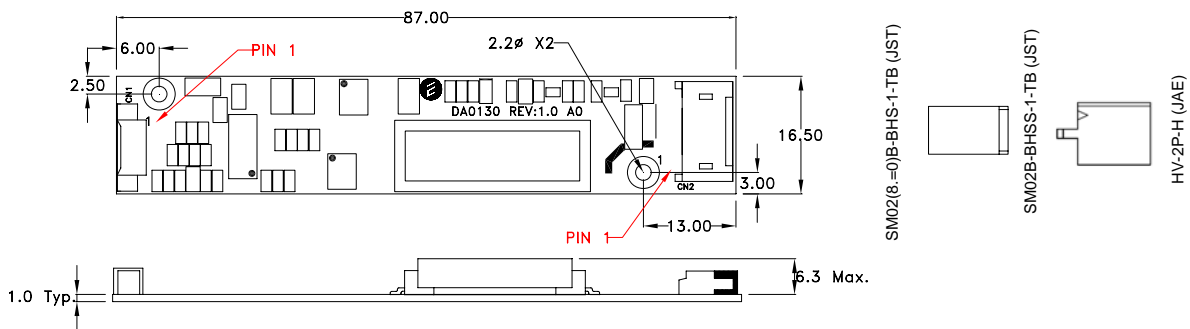
FEATURES :

- Remote ON/OFF
- Current Feedback Circuit
- High Efficiency
- Low noise with voltage resonant circuit
- Fuse Protection
- Ext. PWM Dimming or Voltage Dimming
- Wide Input Voltage Range
- This inverter used follow outputs connectors, SM02(8.0)B-BHS-1-TB, SM02B-BHSS-1-TB, HV-2P-H
- RoHS compliant (S)

TEMPERATURE & HUMIDITY :

- Operating Temperature Range 0°C ~ +50°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

DIMENSIONS : L x W x H 87 x 16.5 x 7 mm



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

Unit : mm
Weight :23 (g) typ.

ORDER KEY :

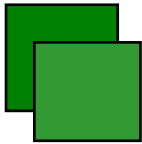
- With order of this Inverter please give the following key.
- 1: for SM02(8.0)B-BHS-1-TB (JST)
- 2: for SM02B-BHSS-1-TB (JST)
- 3: for HV-2P-H (JAE)

For example PS-DA0130-01-1 (S)

Power Systems – The Power Solution

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DC-AC INVERTER UNIT

PS-DA0130-01(S) (4 W SINGLE OUTPUT)

(PRELIMINARY INFORMATION)

Components

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (FR-4 or CEM-3)	t=1mm
2	Connector CN1	1	53261-0590	Molex or equal
3	Connector CN2	1	SM02(8.0)B-BHS-1-TB	JST or equal
			SM02B-BHSS-TB	JST or equal
			HV-2P-H	JAE or equal

Input side CN1:

Pin No.	Symbols	Ratings
CN1-1	V _{in}	5.0 ~ 12.0 Vdc
CN 1-2	GND	-
CN 1-3	V _{rm} t	0 ~ 1.0 = OFF / 2.0 ~ V _{in} = ON
CN 1-4	V _{br}	0 ~ 3.0 Vdc
CN 1-5	V _{br}	Ext. PWM (200~500Hz Low active)

Output side CN2 (SM02(8.0)B-BHS-1-TB)

Pin No.	Symbols	Ratings
CN 2-1	V _{high}	800 Vrms (5.0 mArms)
CN 2-2	V _{low}	(GND)

Output side CN2 (SM02B-BHSS-1-TB)

Pin No.	Symbols	Ratings
CN 2-1	V _{high}	800 Vrms (5.0 mArms)
CN 2-2	V _{low}	(GND)

Output side CN2 (HV-2P-H)

Pin No.	Symbols	Ratings
CN 2-1	V _{high}	800 Vrms (5.0 mArms)
CN 2-2	V _{low}	(GND)

ELECTRICAL CHARACTERISTICS :

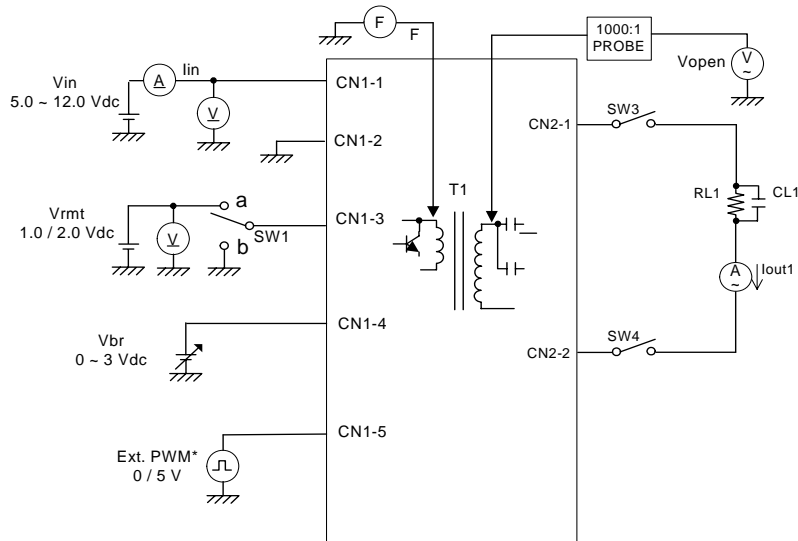
Parameters	Symbols	Conditions			Specification			Unit	Note
		V _{in} (V)	V _{br} (V)	T _u (°C)	Min.	Typ.	Max.		
Output Current	I _{out}	5~12	0.0	0 ~ +50	4.1	5.0	5.9	mArms	
Output Current	I _{out}	5~12	3.0	0 ~ +50	1.5	2.0	2.5	mArms	
Input Current	I _{in}	5~12	0.0	0 ~ +50	-	-	0.8	Adc	
Frequency	F	5~12	0.0	0 ~ +50	44	50	56	kHz	
Open Circuit Voltage	V _{open}	5~12	0.0	0 ~ +50	900	1.200	1.700	Vrms	

- 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 : The external PWM frequency should be in a range of 100 ~ 500 Hz. For other frequency please request. the optimum is normally at 250 Hz, minimized the interference disturbances of the vertical sync. frequency.

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TEST CIRCUIT :


SW 1	Operation of unit
a	Operation
b	Non operation

*) Only active when Vrm is 0 Vdc or floating

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