

# DC-AC INVERTER UNIT

PS-DA0250-02(S) (4 W SINGLE OUTPUTS)

(PRELIMINARY INFORMATION)

**DESCRIPTION :**

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

**Please contact us for confirmation regarding compatibility with your display.**

**APPLICABLE LCD:**

- 6 to 12 inches single lamp type
- Lamp Voltage: 600 Vrms
- Lamp Current: 6.0 mArms
- Lamp Start Up Voltage: 1.500 Vrms (Vin : 12 Vdc)



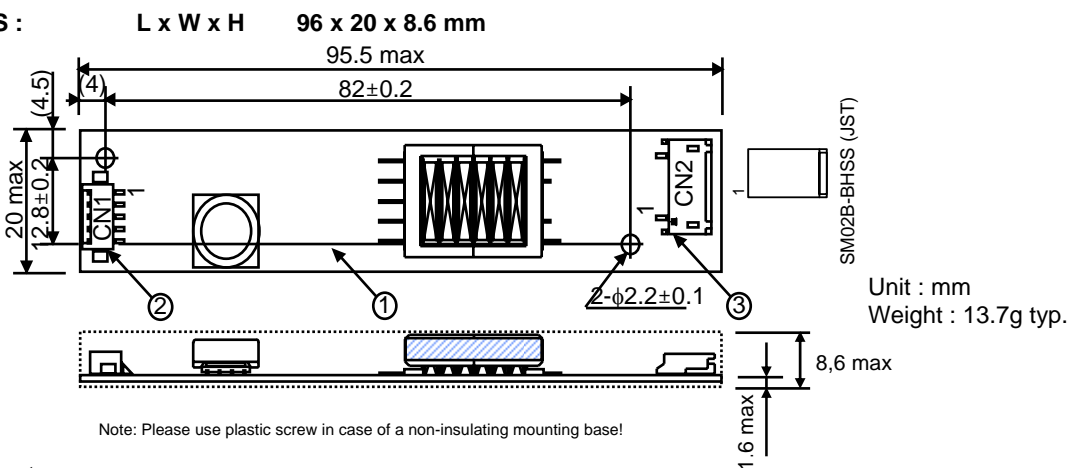
**FEATURES :**

- Wide Operating temperature range
- Ext. PWM-Dimming
- Remote ON/OFF
- RoHS compliant (S)

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range -10°C ~ +60°C
- Storage Temperature Range -30°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :**



**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-1-TB	JST or equal

**Input side CN1:**

Pin No.	Symbols	Ratings
CN 1-1	Vin	10.8 ~ 13.2 Vdc
CN 1-2	GND	
CN 1-3	Vrmt	0 ~ 0.5 = OFF / 5.0 ~ Vin = ON
CN 1-4	Vbr	ext. PWM (low active)
CN 1-5	N.C.	

**Output side CN2 SM02(8.0)B-BHS:**

Pin No.	Symbols	Ratings
CN 2-1	Vhigh	600 Vrms (6.0 mArms)
CN 2-2	N.C.	-
CN 2-3	Vlow	(GND)

**Output side CN2 SM02B-BHSS:**

Pin No.	Symbols	Ratings
CN 2-1	Vhigh	600 Vrms (6.0 mArms)
CN 2-2	GND	-

**Power Systems – The Power Solution**

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(PRELIMINARY INFORMATION)

## ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	12±1.2	5±0.25	0 ~ +60	5.4	6.0	6.6	m Arms	Duty 100%
		12±1.2	5±0.25	0 ~ +60	-	20	-	%	Duty min
Input Current	Iin	12	5±0.25	0 ~ +60	-	0.4	0.73	Adc	
Frequency	F	12±1.2	5±0.25	0 ~ +60	35	45	55	kHz	
Open Circuit Voltage	Vopen	12±1.2	5±0.25	0 ~ +60	1.600	1.800	-	Vrms	

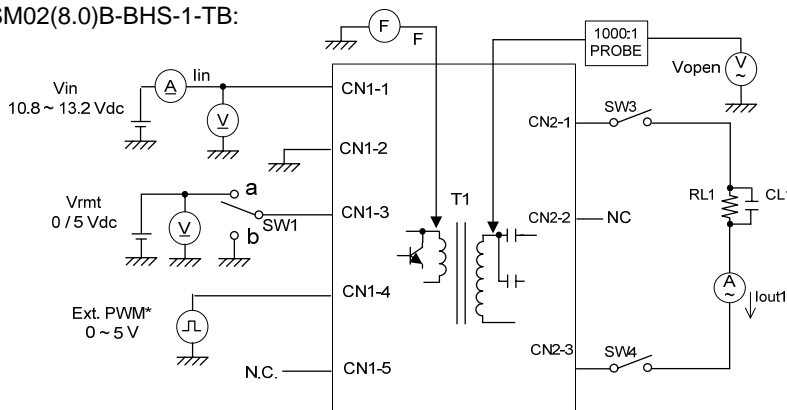
Note 1 : Please keep minimum of 2mm clearance (all directions) between inverter high voltage area as marked on mechanical drawing and any conductors.

Note 2 : Remote ON/OFF (CN1-3) has priority and can not be used in combination with External PWM Dimming (CN1-4). When 'Ext.PWM' (CN1-4) is used 'Vrmt' (CN1-3) should not be connected.

Note 3 : The inverter is optimized for external PWM Signal of 250 Hz (TTL High Active). The frequency could be 100 Hz ~ 2 kHz. Please take care about the vertical frequency harmonics.

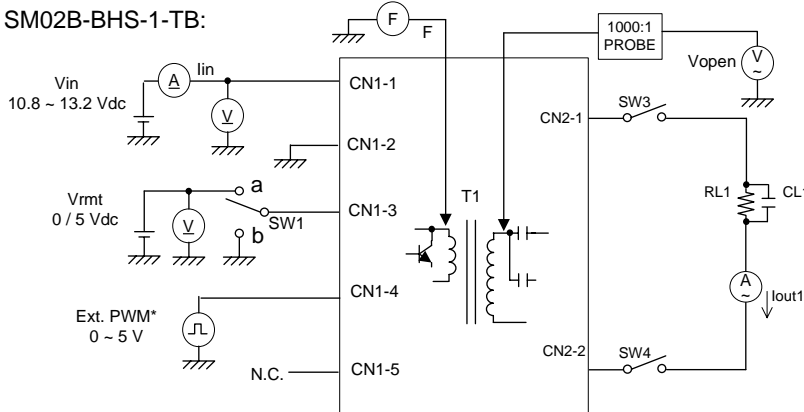
## TEST CIRCUIT :

SM02(8.0)B-BHS-1-TB:



SW 1	Operation of unit
a	Operation
b	Non operation

SM02B-BHS-1-TB:



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