

DC-AC INVERTER UNIT

PS-DA0250-01(S) (4 W SINGLE OUTPUTS)

(PRELIMINARY INFORMATION)

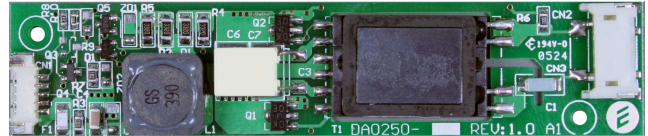
DESCRIPTION :

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 : 5 Vdc)



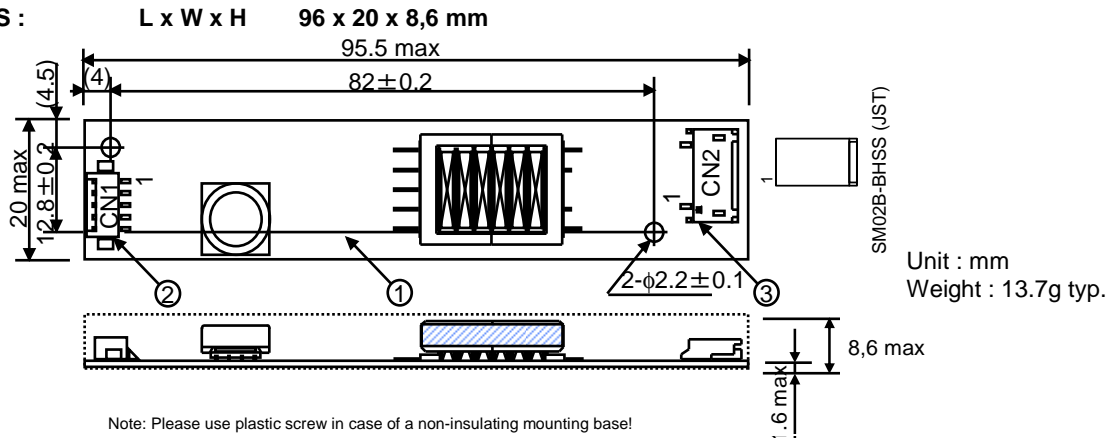
FEATURES :

- 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=1.6mm
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	4.75 ~ 5.25 Vdc
CN 1-2	GND	
CN 1-3	Vrmt	0 ~ 0.5 = OFF / 2.5 ~ 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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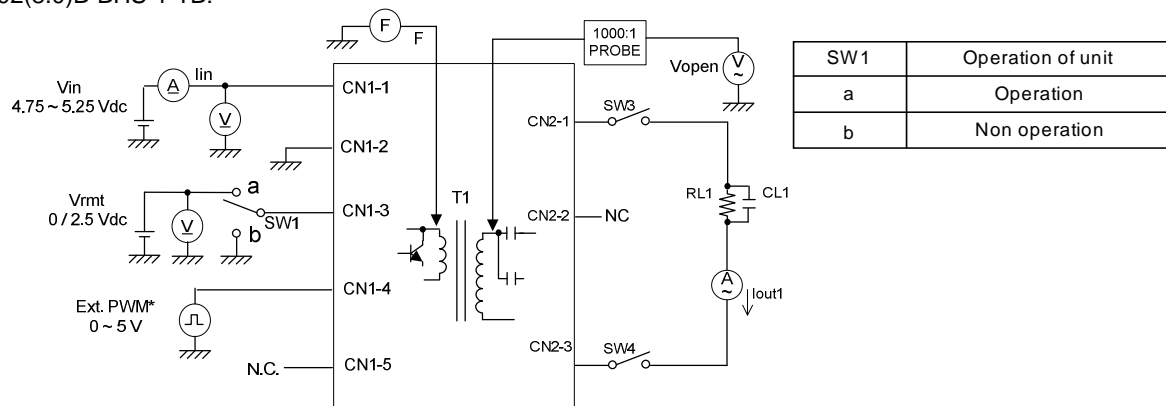
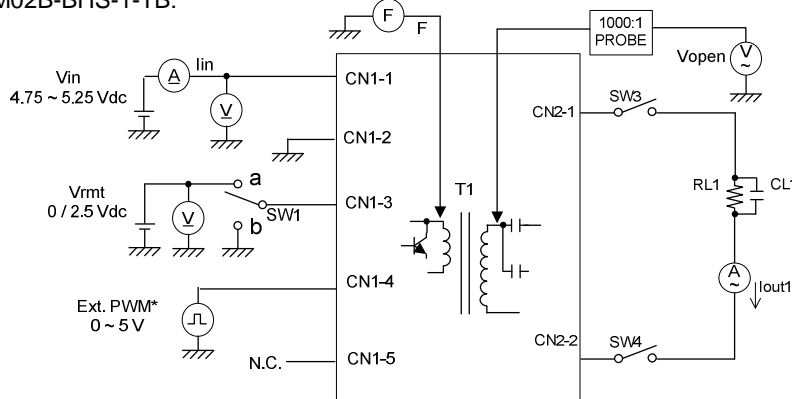
ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	5±0.25	5±0.25	0 ~ +60	5.3	6.0	6.7	mArms	Duty 100%
		5±0.25	5±0.25	0 ~ +60	-	20	-	%	Duty min
Input Current	Iin	5	5±0.25	0 ~ +60	-	0.8	1.0	A _{dc}	
Frequency	F	5±0.25	5±0.25	0 ~ +60	35	45	55	kHz	
Open Circuit Voltage	Vopen	5±0.25	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:

SM02B-BHS-1-TB:

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