

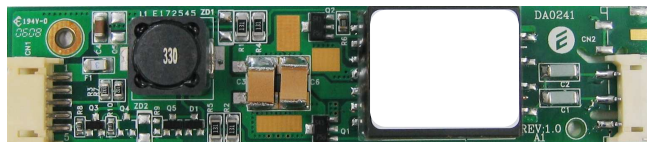
# DC-AC INVERTER UNIT

PS-M06D05S5-NJ5R-145(S) (6,5 W DUAL OUTPUTS)

(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This low profile DC to AC Inverter is developed for dual lamps.  
Optimized for the AUO: B104SN02 and G104SN02



**APPLICABLE LCD:**

- 6.4 to 12 inches double lamp type
- Lamp Voltage 540 Vrms
- Lamp Current 6 mArms
- Lamp Start Up Voltage 1.300 Vrms (Vin : 5 Vdc)

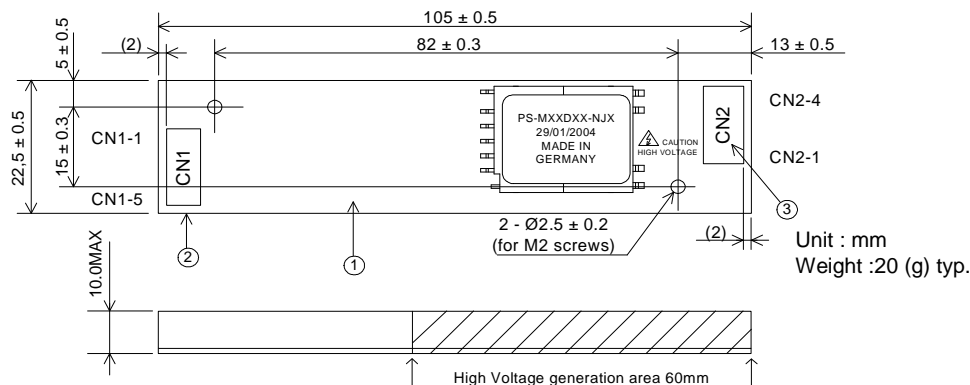
**FEATURES :**

- Remote ON/OFF
- Ext. PWM-Dimming Function
- RoHS compliant (S)

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range 0°C ~ +60°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :** L x W x H 105 x 22,5 x 10mm



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

**Components**

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (FR-4 or CEM-3)	t=1mm
2	Connector CN1	1	S5B-PH-SM3	JST or equal
3	Connector CN2	1	SM03(4.0)B-BHS	JST or equal

**Input side CN1:**

Pin No.	Symbols	Ratings
CN 1-1	Vin	5 Vdc
CN 1-2	GND	
CN 1-3	Ext. PWM	0 / 5 Vdc (L activ)
CN 1-4	N.C.	
CN 1-5	Vrmt	0 / 5 Vdc (H activ)

**Output side CN2:**

Pin No.	Symbols	Ratings
CN 2-1+2	Vhigh	540 Vrms (6 mArms)
CN 2-3	Vlow	0 Vdc

**Power Systems – The Power Solution**

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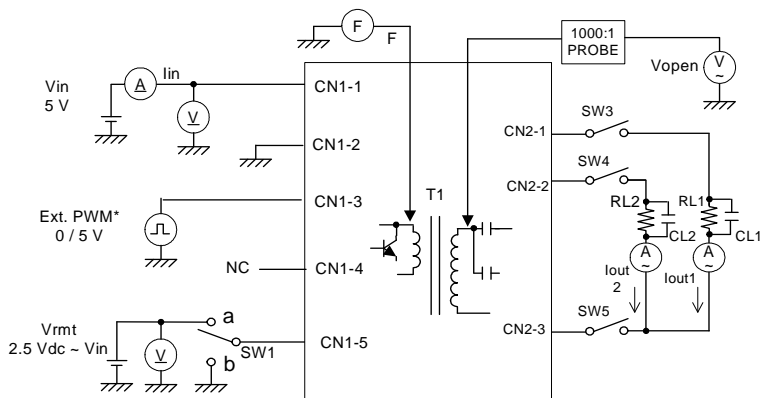
(PRELIMINARY INFORMATION)

## ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout1+2	5±1.2	5±0.25	0 ~ +60	5.5	6.0	6.5	mArms	
Output Current	Iout1+2	5±0.6	5±0.25	0 ~ +60	5.0	6.0	7.0	mArms	
Input Current	Iin	5±1.2	5±0.25	0 ~ +60	-	0.7	1.2	Adc	
Frequency	F	5±1.2	5±0.25	0 ~ +60	TBD	50	TBD	kHz	
Open Circuit Voltage	Vopen	4.7	5±0.25	0 ~ +60	1.200	1.300	-	Vrms	
Dimming Function	Ext PWM	0 / 5	5±0.25	0 ~ +60	5.5	6.0	6.5	mArms	Duty Circle variable

- 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 (CN1-5) has priority and can not be used in combination with External PWM Dimming (CN1-3). When 'Ext.PWM' (CN1-3) is used 'Vrmt' (CN1-5) should not be connected.
- Note 3: The external PWM frequency should be in a range of 100 ~ 500 Hz. For other frequency please request. The optimum is 250 Hz. Here you will normally not get a interference to the vertical sync. frequency.

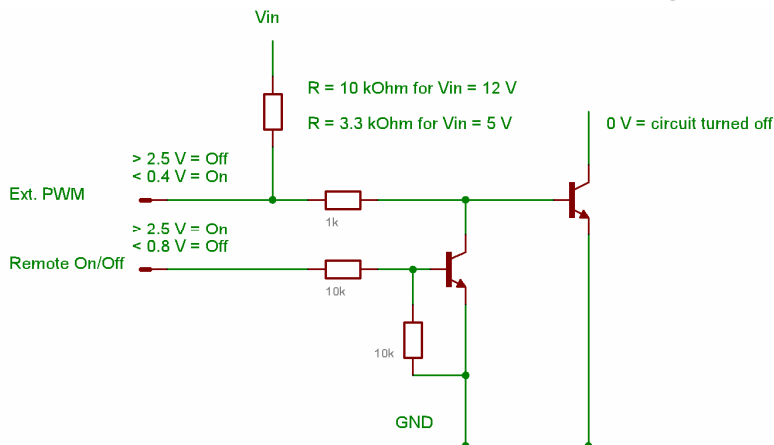
## TEST CIRCUIT :



SW1	Operation of unit
a	Operation
b	Non operation

\*) Only active when Vrmt is 0 Vdc or floating

## EXTERNAL PWM-DIMMING ( Remote ON / OFF Detailed Circuit Diagram ):



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