

# DC-AC INVERTER UNIT

**PS-M05D05S3-NJ4L-011(S) (6,5 W DUAL OUTPUTS)**

(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This low profile DC to AC Inverter is developed for dual lamps.  
Optimized for **Sharp: LQ064V3DG01**

**APPLICABLE LCD:**

6.4 to 12 inches double lamp type  
Lamp Current 6 mArms  
Lamp Start Up Voltage 900 Vrms (Vin : 5 Vdc)



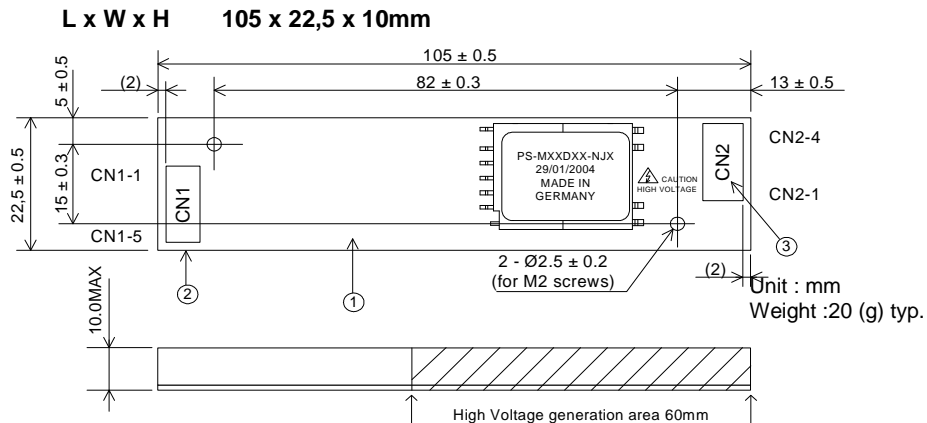
**FEATURES :**

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 :**



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=1.6mm
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 (5 mArms)
CN 2-3	N.C.	-
CN 2-4	Vlow	0 Vdc

**Power Systems – The Power Solution**

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PS-M05D05S3-NJ4L-011(S) (6,5 W DUAL OUTPUTS)

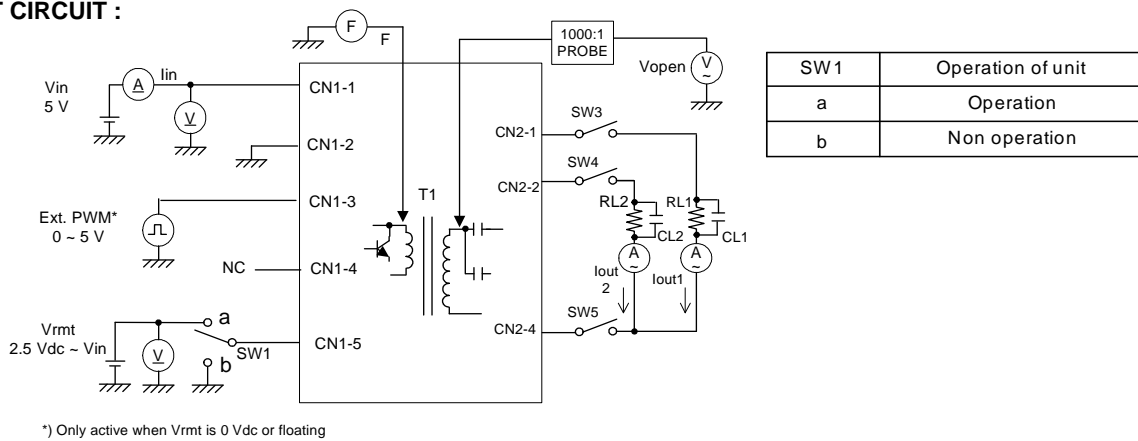
(PRELIMINARY INFORMATION)

## ELECTRICAL CHARACTERISTICS :

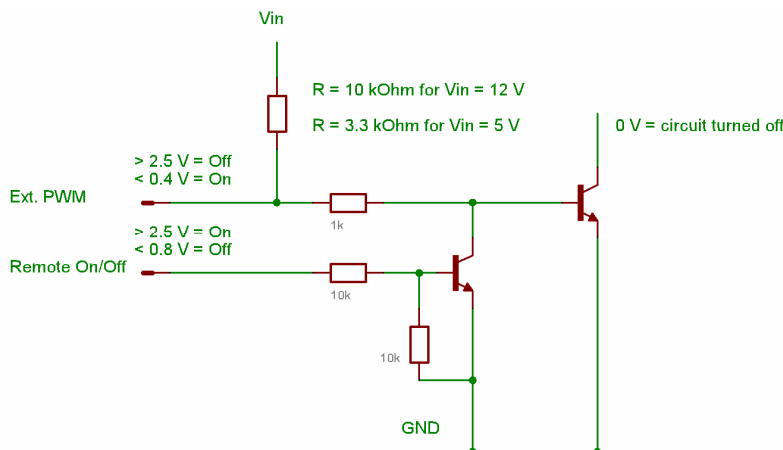
Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	5±0.05	5±0.25	0 ~ +60	4.5	5.0	5.5	m Arms	Duty 100%
Output Current	Iout	5±0.5	5±0.25	0 ~ +60	4.0	5.0	6.0	m Arms	
Input Current	Iin	5±0.5	5±0.25	0 ~ +60	-	1.6	2.5	Adc	
Frequency	F	5±0.5	5±0.25	0 ~ +60	50	60	70	kHz	
Open Circuit Voltage	Vopen	4.75	5±0.25	0 ~ +60	900	950	-	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 (CN1-5) 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 normally at 250 Hz, and minimizes the interference disturbances of the vertical sync. frequency.

## TEST CIRCUIT :



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



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