

# DC-AC INVERTER UNIT

**PS-DA0253-080-E-B(S) (9 W DUAL OUTPUTS)**

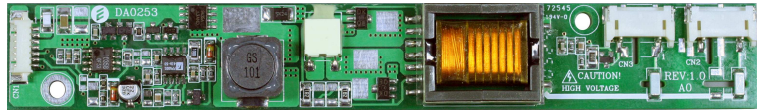
(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This DC/AC Inverter is developed for many kinds of LCDs.  
And Optimized for **Sharp: LQ121S1LG61**

**APPLICABLE LCD:**

- 10 to 15 inches dual lamps
- Lamp Voltage 600 Vrms
- Lamp Current 2 x 6.0 mArms
- Lamp Start Up Voltage 1.700 Vrms (Vin : 12 Vdc)



**FEATURES :**

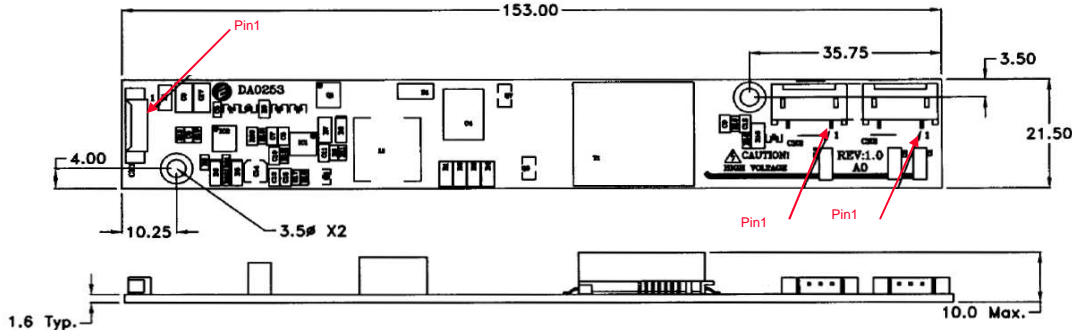
- Current feedback circuit
- High efficiency
- Low noise with voltage resonant circuit
- Regulated output current
- RoHS compliant (S)
- Dimming voltage 0~3 Vdc

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range -30°C ~ +80°C (for Sharp LQ21S1LG61 only. For other display please request)
- Storage Temperature Range -30°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :** L x W x H 153 x 21.5 x 10 mm

Unit : mm  
Weight :40 (g) typ.



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	53261-0790	Molex or equal
3	Connector CN2 ~ CN3	2	SM02(8.0)B-BHS-1-TB	JST or equal

**Input side CN1:**

Pin No.	Symbols	Ratings
CN 1-1+2	Vin	10.8 ~ 13.2 Vdc
CN 1-3+4	GND	
CN 1-5	Vrmt	0 ~ 0.4 = OFF / 2.5 ~ Vin = ON
CN 1-6	Vbr	0 ~ 3.0 Vdc
CN 1-7	GND	

**Output side CN2 ~ CN3**

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

**Power Systems – The Power Solution**

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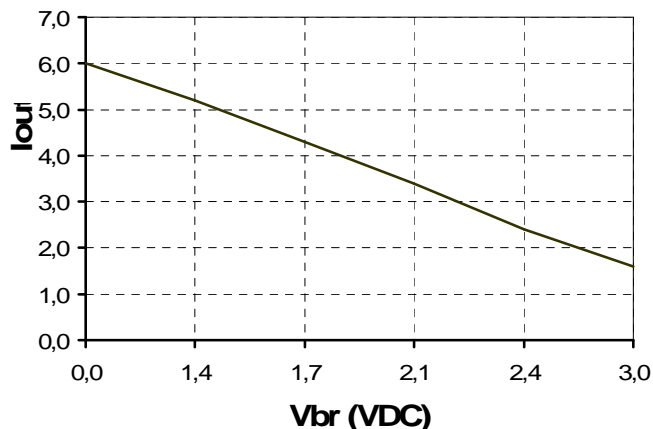
(PRELIMINARY INFORMATION)

**ELECTRICAL CHARACTERISTICS :**

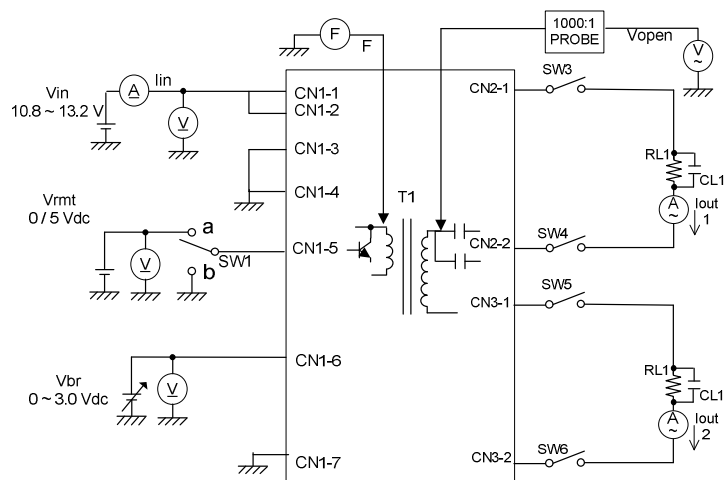
Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vrmt (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	12±1.2	5±0.25	-30 ~ +80	5.5	6.0	6.5	m Arms	Duty 100%
Output Current	Iout	12±0.6	5±0.25	-30 ~ +80	1.4	1.6	2.0	m Arms	Vbr = 3.0 Vdc
Input Current	Iin	12±1.2	5±0.25	-30 ~ +80	-	0.75	1.0	Adc	
Frequency	F	12±1.2	5±0.25	-30 ~ +80	32.5	40	47.5	kHz	
Open Circuit Voltage	Vopen	11.4	5±0.25	-30 ~ +80	1.500	1.700	1.900	Vrms	
No Load Shutdown	Tsd	12±1.2	5±0.25	-30 ~ +80	1.0	-	-	sec	without load

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

**DIMMING CHARACTERISTICS (Reference)**



**TEST CIRCUIT :**



SW1	Operation of unit
a	Operation
b	Non operation

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