

DC-AC INVERTER UNIT

PS-DA0290-324-B(S) (6,5W DUAL OUTPUTS WITH DIMMING FUNCTION) (PRELIMINARY INFORMATION)

DESCRIPTION :

This DC to AC Inverter was developed for many other low LCD Backlight power supply as low profile applications, either for LCD Monitor or Industrial PC.

Optimized for Sharp: **LQ064V3DG01, LQ064V3DG02, LQ064V3DG04**

Picture is coming soon

APPLICABLE LCD:

6.4 to 15 inches dual lamp type
Lamp voltage 370 Vrms
Lamp current 5.0 mArms
Lamp start up voltage 1.600 Vrms (Vin : 12 Vdc)

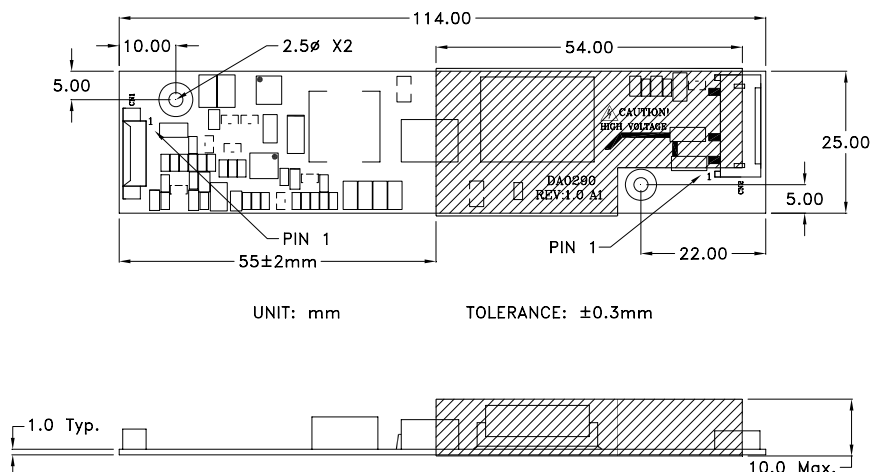
FEATURES :

Current feedback circuit
High efficiency
Low noise with voltage resonant circuit
Regulated output current
(Option) alarm signal function
Fit & function compatible to NEC inverter 104PW201
RoHS compliant (S)

TEMPERATURE & HUMIDITY :

Operating Temperature Range -10°C ~ +60°C (Final approval after tests)
Storage Temperature Range -30°C ~ +80°C
Humidity 95 %RH max

DIMENSIONS : L x W x H 114 x 25 x 10 mm



Unit : mm
Weight : (g) typ.

UNIT: mm TOLERANCE: ±0.3mm

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

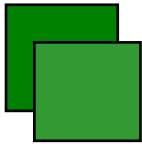
Components

No.	Part Description	Qty.	Material	Note
1	PCB	1	UL94V-0 (FR-4 or CEM-3)	t=1.6mm
2	Connector CN1	1	53261-0890	Molex or equal
3	Connector CN2	1	SM04(4.0)B-BHS-1-TB	JST or equal

Power Systems – The Power Solution

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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	Vbr1 / Rbr1	0~2.5 Vdc / 0~10 kΩ
CN 1-7	Vbr2 / Rbr2	GND / 0~10 kΩ
CN 1-8	N.C.	(Vst 0 Vdc / 5 Vdc)

Output side CN2

Pin No.	Symbols	Ratings
CN 2-1	Vhigh	370 Vrms (5.0 mArms)
CN 2-2	Vhigh	370 Vrms (5.0 mArms)
CN 2-3	N.C.	-
CN 2-4	Vlow	(GND)

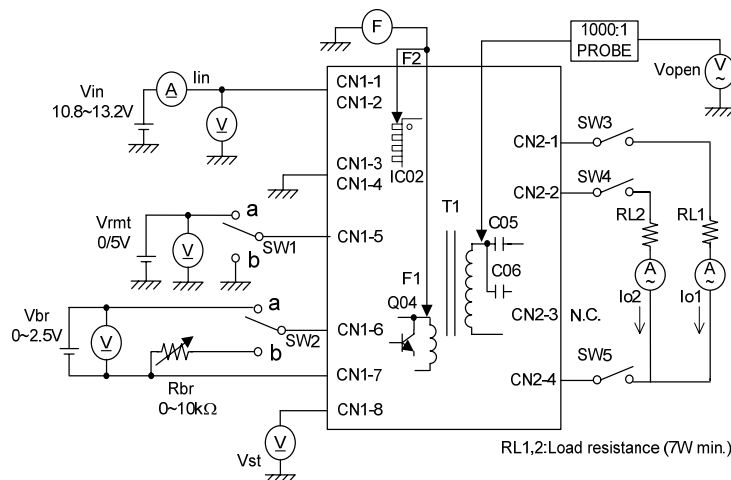
Vst: This is an output pin and it is active high (+5V) if any lamp opens/fails.

ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vbr (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	10,8 ~ 13,2	2.5	-10 ~ +60	4.5	5.0	5.5	mArms	or Vr = 10KΩ
Output Current	Iout	10,8 ~ 13,2	0.0	-10 ~ +60	1.2	1.7	2.2	mArms	or Vr = 0Ω
Input Current	Iin	10,8 ~ 13,2	2.5	-10 ~ +60	-	0.46	0.70	Adc	
Frequency	F	10,8 ~ 13,2	2.5	-10 ~ +60	50	60	72	kHz	
Open Circuit Voltage	Vopen	10,8 ~ 13,2	2.5	-10 ~ +60	-	1.600	-	Vrms	
No Load Shutdown	Tsd	10,8 ~ 13,2	2.5	-10 ~ +60	-	1.0	-	sec	without load

- 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 : Before apply any control signal into inverter please provide Vcc first. Please follow the reversed sequence during power off. Power off control signal first then power off Vcc.
- Note 3 : Resistor dimming: 10kΩ – max. luminance.
- Note 4 : Option: CCFL – fail signal

TEST CIRCUIT :



Vbr = 0V :brightness max.
Rbr = 10KΩ :brightness max.

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