

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.

Picture is coming soon

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

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)

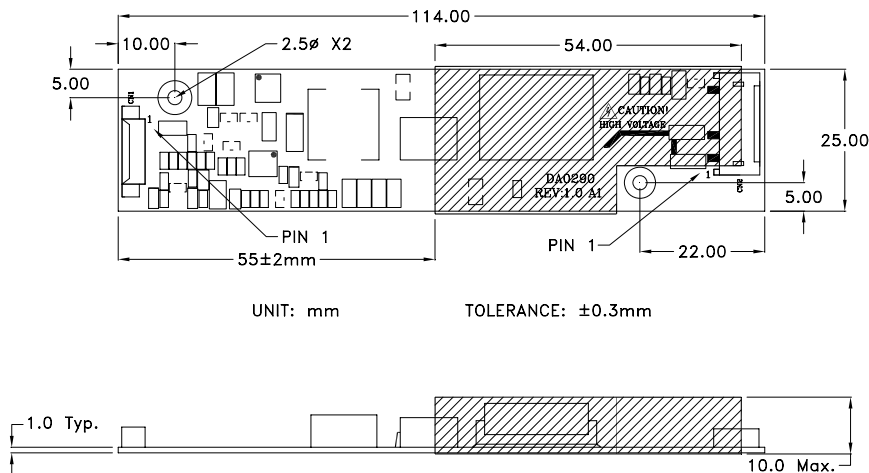
FEATURES :

- 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

Web: www.Power-Systems.de
Email: Info@Power-Systems.de

Address: Hauptstr. 48 ; 74360 Ilsfeld-Auenstein / Germany
Tel. : + 49 / 70 62 / 67 59 - 6
Fax: + 49 / 70 62 / 67 59 - 800

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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	0.0	-10 ~ +60	4.5	5.0	5.5	mArms	or Vr = 0Ω
Output Current	Iout	10,8 ~ 13,2	2.5	-10 ~ +60	1.2	1.7	2.2	mArms	or Vr = 10KΩ
Input Current	Iin	10,8 ~ 13,2	0.0	-10 ~ +60	-	0.46	0.70	Adc	
Frequency	F	10,8 ~ 13,2	0.0	-10 ~ +60	50	60	72	kHz	
Open Circuit Voltage	Vopen	10,8 ~ 13,2	0.0	-10 ~ +60	-	1.600	-	Vrms	
No Load Shutdown	Tsd	10,8 ~ 13,2	0.0	-10 ~ +60	-	1.0	-	sec	without load

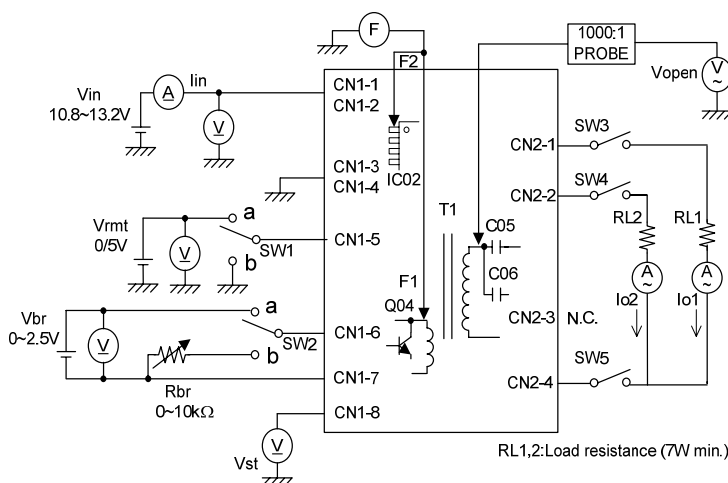
Note 1 : Please keep minimum of 2mm clearance (all directions) between inverter high voltage area as marked on mechanical drawing and any conductors.

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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