

DC-AC INVERTER UNIT

PS-DA0253-01(S) (9 W DUAL OUTPUTS)

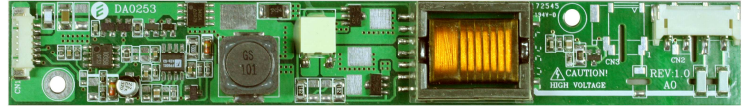
(PRELIMINARY INFORMATION)

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.

APPLICABLE LCD:

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



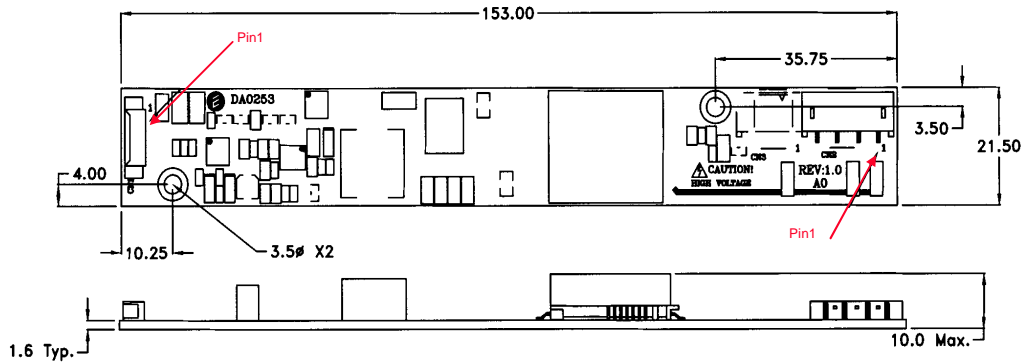
FEATURES :

- Current Feedback Circuit
- High Efficiency
- Low noise with voltage resonant circuit
- Regulated output current
- RoHS compliant (S)

TEMPERATURE & HUMIDITY :

- Operating Temperature Range 0°C ~ +50°C
- Storage Temperature Range -20°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)	1,6 mm
2	Connector CN1	1	53261-0790	Molex or equal
3	Connector CN2	1	SM04(4.0)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 ~ 1.8 Vdc
CN 1-7	Vbr	0 ~ 10kOhm

Output side CN2

Pin No.	Symbols	Ratings
CN 2-1	Vhigh	600 Vrms (6.0 mArms)
CN 2-2	Vhigh	600 Vrms (6.0 mArms)
CN 2-3	N.C.	-
CN 2-4	Vlow	(GND)

Power Systems – The Power Solution

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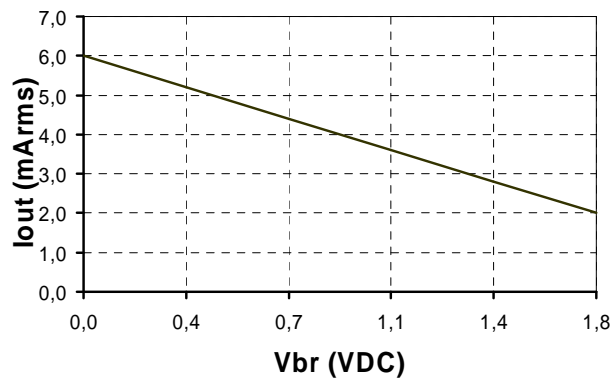
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ELECTRICAL CHARACTERISTICS :

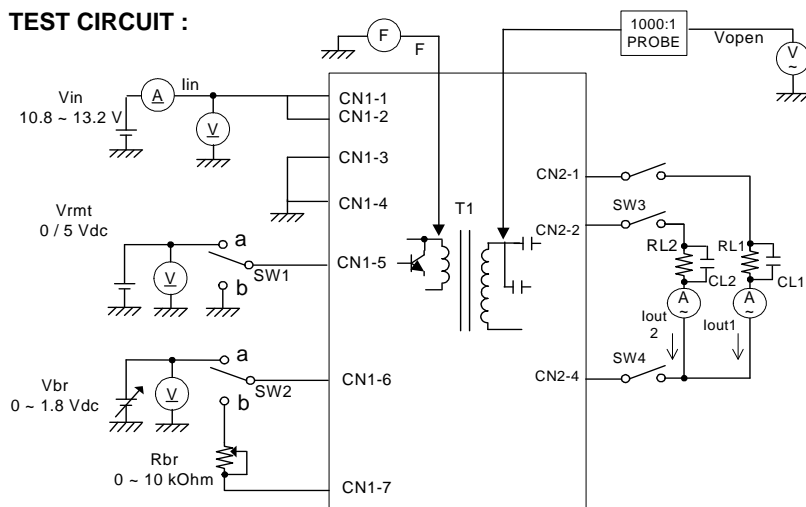
Parameters	Symbols	Conditions			Specification			Unit	Note
		V _{in} (V)	V _{rmt} (V)	T _u (°C)	Min.	Typ.	Max.		
Output Current	I _{out}	12±1.2	5±0.25	0 ~ +50	5.5	6.0	6.5	m Arms	Duty 100%
Output Current	I _{out}	12±0.6	5±0.25	0 ~ +50	1.3	1.6	2.0	m Arms	V _{br} = 1.8Vdc
Input Current	I _{in}	12±1.2	5±0.25	0 ~ +50	-	0.75	1.0	A _{dc}	
Frequency	F	12±1.2	5±0.25	0 ~ +50	32.5	40	47.5	kHz	
Open Circuit Voltage	V _{open}	11.4	5±0.25	0 ~ +50	1.500	1.700	1.800	V _{rms}	
No Load Shutdown	T _{sd}	12±1.2	5±0.25	0 ~ +50	-	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.

DIMMING CHARACTERISTICS (Reference)



TEST CIRCUIT :



SW1	Operation of unit
a	Operation
b	Non operation

SW2	Operation of unit
a	V _{br} 0 ~ 1.8 Vdc dimming
b	R _{br} 0 ~ 10 kOhm dimming

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