

DC-AC INVERTER UNIT

PS-DA0129-183 (S) (5 W SINGLE OUTPUT)

(PRELIMINARY INFORMATION)

DESCRIPTION :

This DC to AC Inverter was developed for notebook computer and many other low LCD Backlight power supply as low profile applications, either for Note Book PC or Industrial. Optimized for **Kyocera: TCG057QV1AC-G50 and KCG047QV1AA-A21**

APPLICABLE LCD:

- 10 to 12 inches single lamp type
- Lamp Voltage 685 Vrms
- Lamp Current 5.0 mArms
- Lamp Start Up Voltage 1.600 Vrms (Vin : 5 Vdc)



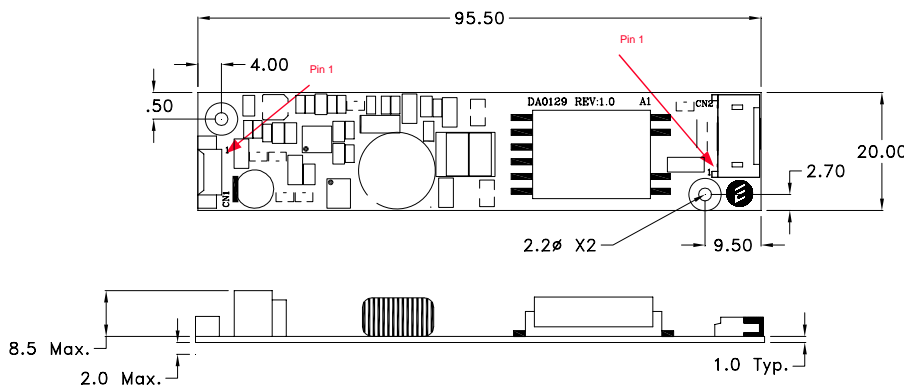
FEATURES :

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

TEMPERATURE & HUMIDITY :

- Operating Temperature Range -10°C ~ +55°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

DIMENSIONS : L x B x H 95.5 x 20.0 x 9.5



Unit : mm
Weight :20(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	53261-0590	Molex or equal
3	Connector CN2	1	SM02(8.0)B-BHSS-1-TB	JST or equal

Input side CN1:

Pin No.	Symbols	Ratings
CN 1-1	Vin	4.5 ~ 5.5 Vdc
CN 1-2	GND	-
CN 1-3	Vrmt	0 ~ 0.5 = OFF / 2.5 ~ Vin = ON
CN 1-4	Vbr	0 ~ 3 Vdc
CN 1-5	N.C.	-

Output side CN2

Pin No.	Symbols	Ratings
CN 2-1	Vhigh	685Vrms (5.0 mArms)
CN 2-2	N.C.	-
CN 2-3	Vlow	(GND)

Power Systems – The Power Solution

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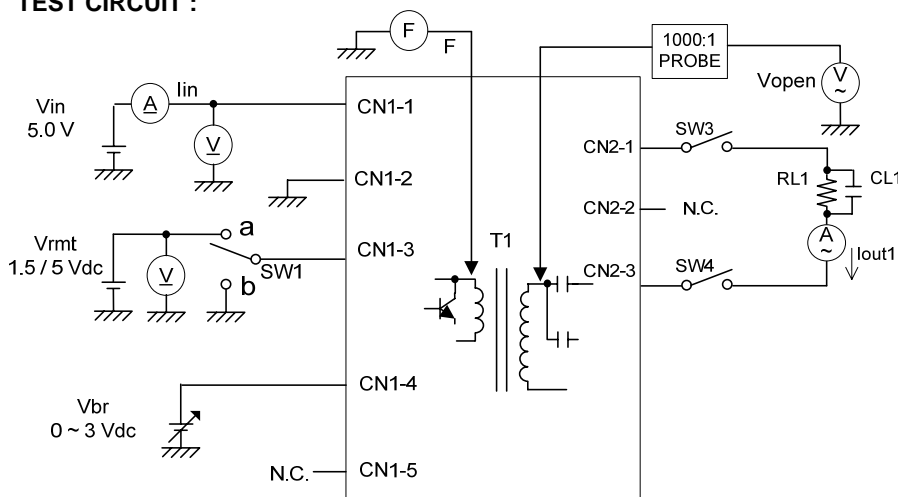
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ELECTRICAL CHARACTERISTICS :

Symbols	Conditions			Specification			Unit	Note
	Vin (V)	Vbr (V)	Tu (°C)	Min.	Typ.	Max.		
Iout	5±0.25	0.0	-10 ~ +55	4.5	5.0	5.5	m Arms	Duty = 100%
Iout	5±0.25	3.0	-10 ~ +55	2.0	2.5	3.0	m Arms	Duty = 50%min.
Iin	5±0.25	0.0	-10 ~ +55	-	0.8	1.0	Adc	
F	5±0.25	0.0	-10 ~ +55	35	45	55	kHz	
Vopen	5±0.25	0.0	-10 ~ +55	1.500	1.600	1.800	Vrms	
Tsd	5±0.25	0.0	-10 ~ +55	-	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.

TEST CIRCUIT :



SW1	Operation of unit
a	Operation
b	Non operation

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