

DC-AC INVERTER UNIT

PS-L0612A-239 (R) (5 W SINGLE OUTPUT WITH DIMMING FUNCTION)

DESCRIPTION :

This low profile DC to AC Inverter is developed for single lamps, low power LCD back-light. Optimized for **Kyocera: TCG057QV1AA-G00**

APPLICABLE LCD:

Lamp Voltage 685 Vrms
 Lamp Current 4.0 mArms
 Lamp Start Up Voltage 1.800 Vrms (Vin : 12 Vdc)



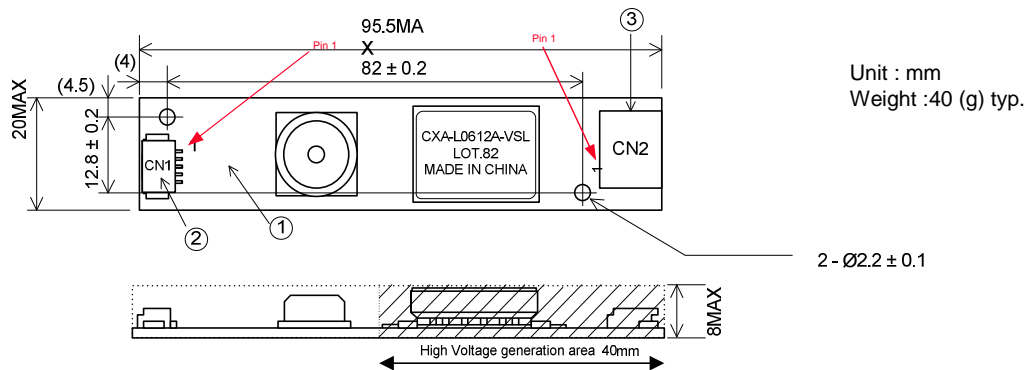
FEATURES :

- Wide operating temperature range
- Current feedback circuit
- High efficiency
- Low noise with voltage resonant circuit
- Regulated output current
- RoHS compliant (R)

TEMPERATURE & HUMIDITY :

Operating Temperature Range -10°C ~ +70°C
 Storage Temperature Range -30°C ~ +85°C
 Humidity 95 %RH max

DIMENSIONS :



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	9.6 ~ 15.0 Vdc
CN 1-2	GND	-
CN 1-3	Vrmt	0 ~ 0.5 = OFF / 5.0 ~ 15.0 = ON
CN 1-4	Vbr	0 ~ 3 Vdc
CN 1-5	N.C	For an internal circuit use. Don't connect

Output side CN2:

Pin No.	Symbols	Ratings
CN 2-1	VHIGH1	685 Vrms (4.0m Arms)
CN 2-2	N.C.	-
CN 2-3	VLOW	0Vdc

Power Systems – The Power Solution

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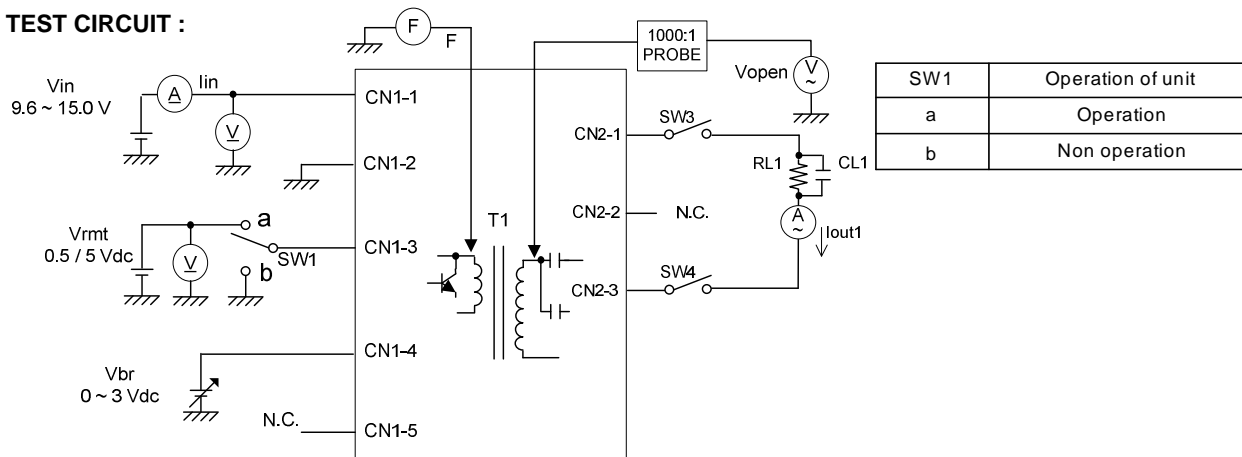
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ELECTRICAL CHARACTERISTICS :

Parameters	Symbols	Conditions			Specification			Unit	Note
		Vin (V)	Vbr (V)	Tu (°C)	Min.	Typ.	Max.		
Output Current	Iout	9.6 ~ 15	0.0	-10 ~ +70	3.5	4.0	4.5	m Arms	
Output Current	Iout	9.6 ~ 15	3.0	-10 ~ +70	2.0	2.5	3.0	m Arms	
Input Current	Iin	12.0	0.0	-10 ~ +70	-	0.4	0.65	A _{dc}	
Frequency	F	9.6 ~ 15	0.0	-10 ~ +70	52	60	68	kHz	
Open Circuit Voltage	Vopen	9.6 ~ 15	0.0	-10 ~ +70	1.500	1.800	-	V _{rms}	

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 :



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