

8.4" PIEZOELECTRIC INVERTER

1. Scope

This applies to the CFL Inverter (cold-cathode tube inverter) HBL-0217.

2. Electrical Characteristics

a. Absolute Maximum Rating

Item	Symbol	Rating		Unit	Condition
		Min	Max		
Input voltage	Vin	0	+6.0	V	
IC Source Voltage	IC5V	-0.3	+6.0	V	
Operating Temperature	Tope	-10	+60	°C	Humidity 30 ~ 90%RH (No Condensation)
Storage Temperature	Tstg	-25	+70	°C	Humidity 15 ~ 95%RH (No Condensation)

b. Input/Output Characteristics

The measuring circuit and measuring method shall be as set forth in Section 4.

(Unless otherwise specified, Ta = 25°C)

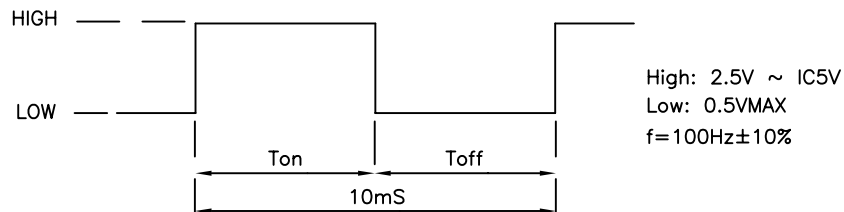
Values are those obtained 3 minutes after the power is turned on.

Item	Specification			unit	Note
	min	typ	max		
Input Voltage	+3.0	+3.6	+5.5	Vin	(Vin)
Input Current (I)		125	150	mA	at Vin=3.6V Rated Tube Current
Input Current (II)		30	45	mA	at Vin=3.6V On Duty 30%
Rated Tube Current	0.9	1.0	1.1	mArms	at Vin=3.6V On Duty 100%
Operating Frequencies	150		170	kHz	at Vin=3.6V Rated Tube Current
Output Open Voltage	800			Vrms	Vin=3.6V, Ta=-10°C
ON/OFF function	ON: ON/OFF terminal signal HIGH (2.5V ~ IC5V) OFF: ON/OFF terminal signal LOW (0.5V MAX)				
IC Voltage Source	+4.5	+5.0	+5.5	V	(IC5V)
IC Current Source			20	mA	at IC5V=5V
Standby Current			10	μA	Input current at Vin=3.6V
Standby Current			5	μA	IC5V Current at IC5V=5V

c. Dimming

To use the dimming function, apply the following signal to the ON/OFF terminal, with a Duty rate of 30% ~ 95%.

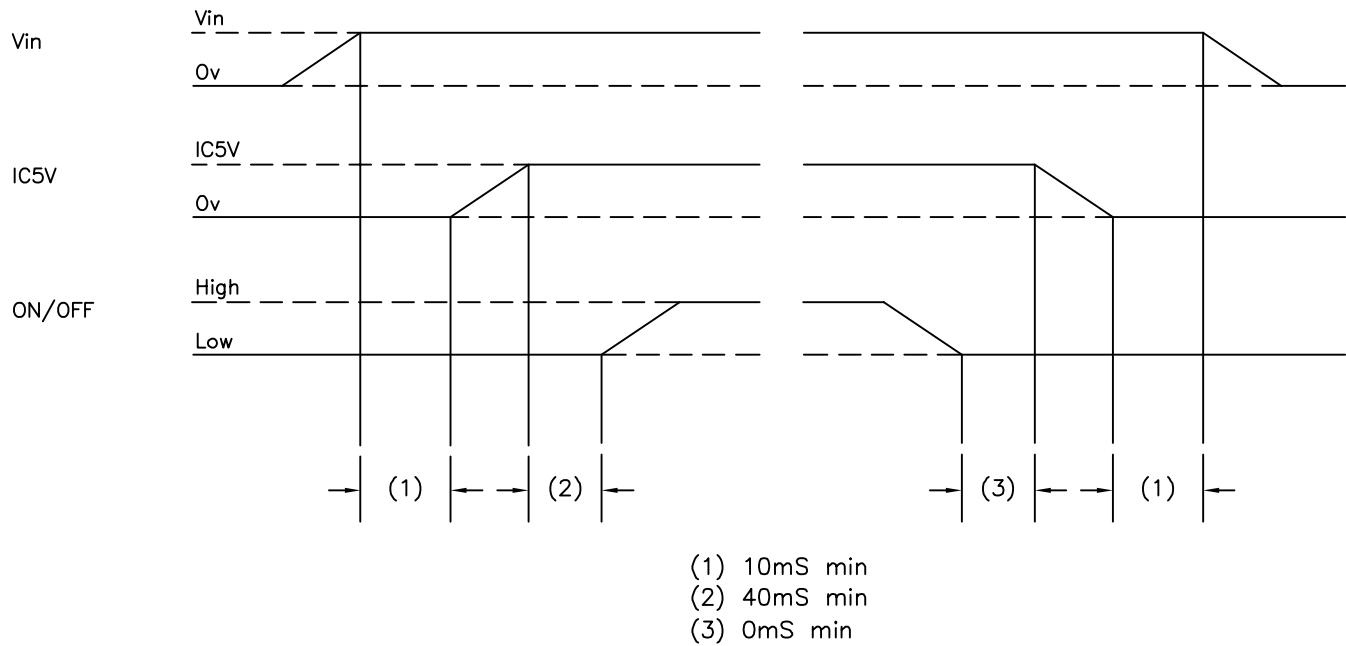
No Dimming function with 100% Duty rate (always High)



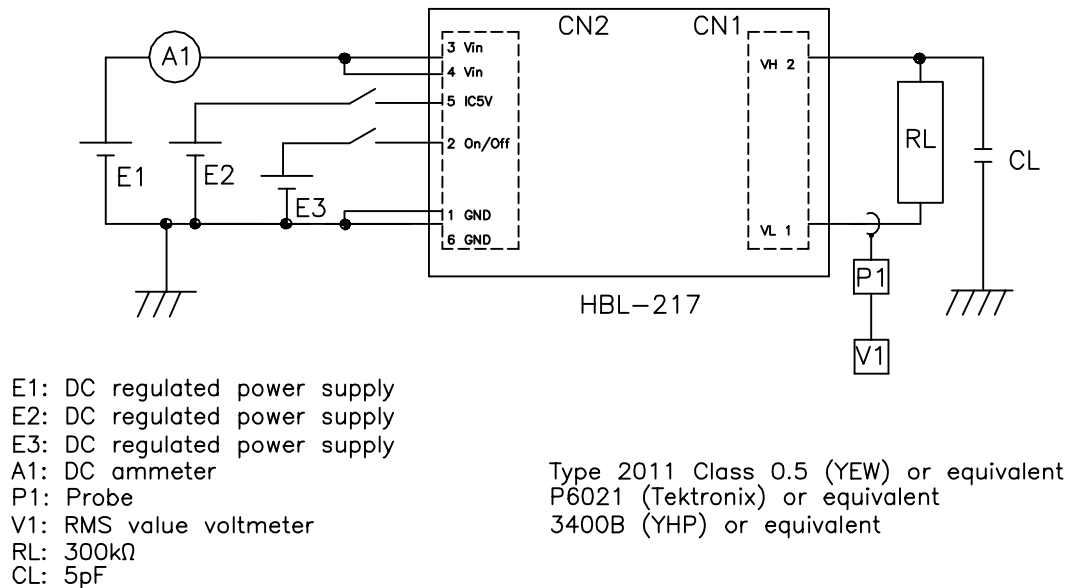
FILE NAME: ACAD\MXFMR\A3122021.DWG	SCALE: NONE	REV: A	DATE: 10/19/00	SHEET 1 OF 4
TAMURA CORPORATION OF AMERICA 43352 BUSINESS PARK DRIVE • TEMECULA • CA • 92590 TEL: (909)699-1270 • FAX: 9096769482	TITLE: HBL-0217		PIEZOELECTRIC INVERTER 1.0W/3.6V/500VAC/1mA	
	DOCUMENT NUMBER:		P-A3-12202	
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c. Input Sequence

Please use the following sequence for turning on and off:



4. Measuring Circuit and Method for Electrical Characteristic



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5. Reliability

The reliability is verified on the following items

Item	Specification
High temp. storage	Ambient temperature 70°C, 240H
Low temp. storage	Ambient temperature -20°C, 240H
High temp. and humidity storage	Ambient temperature +40°C, Humidity 95%, 240H
Temperature Cycle	-25°C ~ 70°C, 5 cycle
High temperature operation	Ambient temperature 60°C, input voltage 5.5V, Rated Tube Current (Equivalent load or specified tube)
Vibration	Acceleration 3G, frequency 10~ 55Hz, sweep 45 min. Once in each of X, Y, and Z directions.
Shock	Acceleration 80G, acting time 11ms, 3 times in each of X, Y, and Z directions.

After the end of each test, leave the product at room temperature and humidity for 24 hours. The Electrical and Mechanical characteristics shall remain within spec.

6. Marking

- Label containing Model No., Qty and Lot No. should be on carton.
- Manufacturing lot number on part explanation

Example: The 1st lot in June, 1999

9 6 A 1

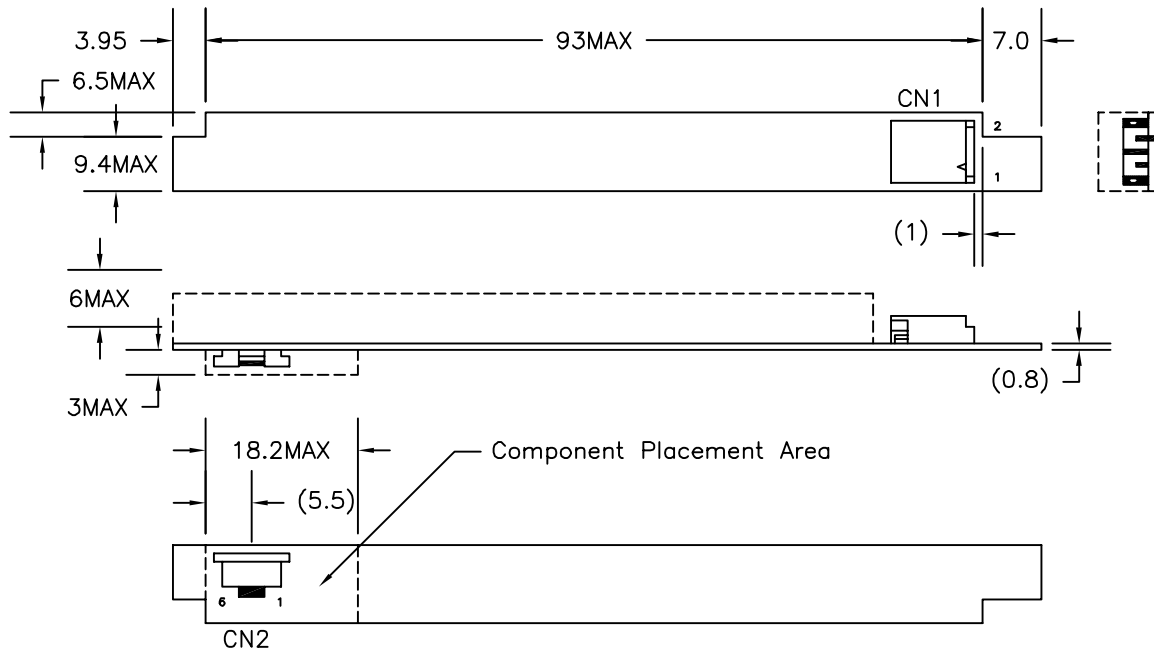
└── Production Line, Factory ID
 └── Lot number in a month A: 1st lot (ascending order of the alphabet)
 └── Month (from January thru September : the digit, Oct: X, Nov: Y, Dec: Z)
 └── Last digit of the calendar year

7. Precautions for static electricity

When transporting this product, use materials that will not develop an electrical charge.
 When handling this product, be sure to wear antistatic wrist bands or other protective equipment to prevent the product from being destroyed by any electric charge.

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8. Outline Dimensions



CN2 Part Number 006212006340800 (KYOCERA ELC0)

CN2

NO.	Pin Assignment
NO. 1	GND
NO. 2	ON/OFF
NO. 3	Vin
NO. 4	Vin
NO. 5	IC5V
NO. 6	GND

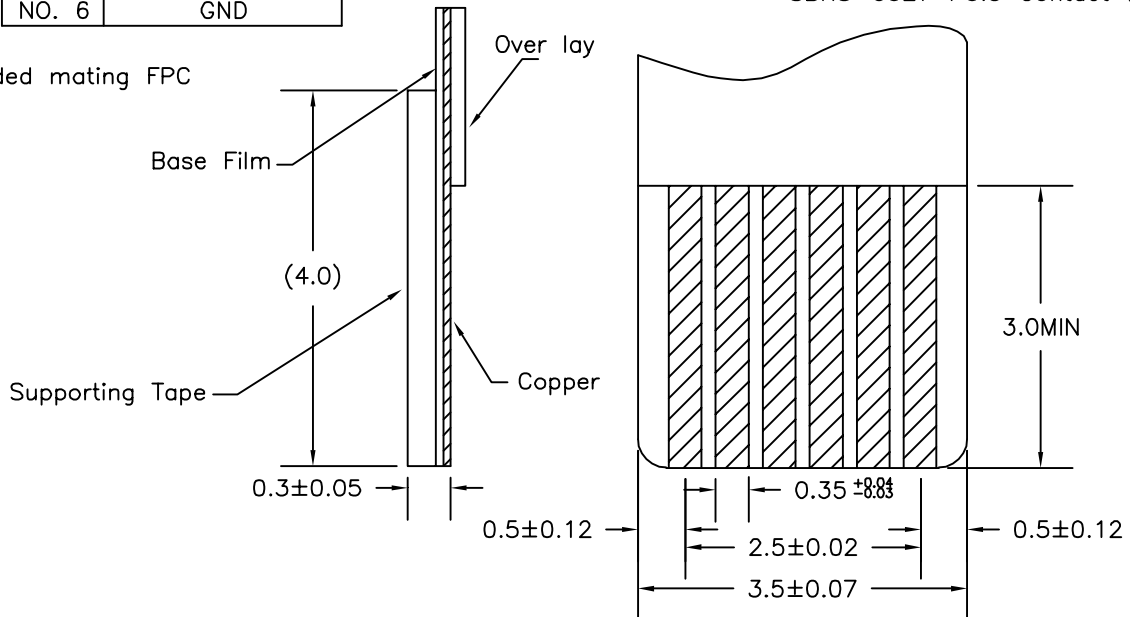
CN1 Part Number SM02B-BHSS-1-TB (JST)

CN1

NO.	Pin Assignment
NO. 1	COLD
NO. 2	HOT

Mating Connector
BHSR-02VS-1 Housing (JST)
SBHS-002T-P0.5 Contact (JST)

Recommended mating FPC



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