PIEZOELECTRIC INVERTER 1.0W/3.6V/500VAC/2mA

1. Scope
   This applies to the CFL Inverter (cold-cathode tube inverter) HBL-0219.

2. Electrical Characteristics
   a. Absolute Maximum Rating

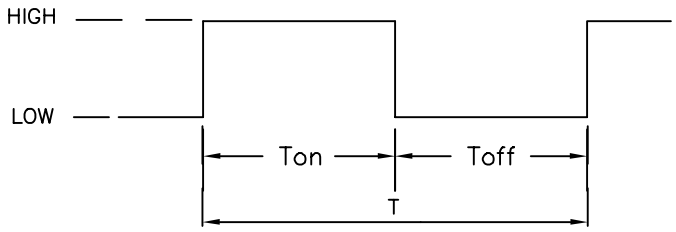
Input voltage	17V MAX.
Max. output power	2.2W MAX.

   b. Input/Output Characteristics
      The measuring circuit and measuring method shall be as set forth in Clause 4. (Unless otherwise specified, Ta = 25°C)
      Values are those obtained 3 minutes after the power is turned on.

Item	Specification
Input Voltage	8.0V ~ 14V
Output Current Detection	3.0mArms ± 10% (BLOFF:H=2.5~4.0V)
Operating Frequency	100KHz ± 15%
Output open voltage	1300Vrms min (at Ta=0°C)
Input current	400mA MAX (Vin = 8.0V, BLOFF=H)
ON/OFF function	ON: BLOFF terminal H=2.5V ~ 4.0V) OFF: BLOFF terminal I=0V ~0.8V)
Standby Current	5μA MAX (BLOFF=L)

      Note: To start inverter, BLOFF terminal is high after Vin voltage reaches input voltage range.

   c. Dimming
      To use the dimming function, apply the following signal to the BLOFF terminal.



Frequency 100~250Hz
Duty 30~95%, 100%

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TAMURA CORPORATION OF AMERICA 43352 BUSINESS PARK DRIVE • TEMECULA • CA • 92590 TEL: (909)699-1270 • FAX: 9096769482	TITLE: HBL-0219		PIEZOELECTRIC INVERTER 1.0W/3.6V/500VAC/2mA	
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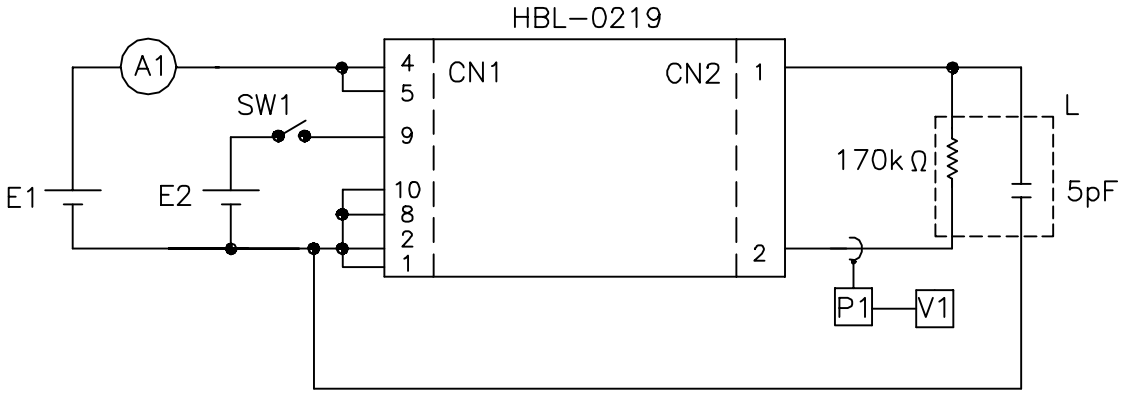
3. Measuring Circuit and Method for Electrical Characteristic



E1: DC regulated power supply
E2: DC regulated power supply
V1: RMS voltmeter — 3400B (YHP) or equivalent
A1: DC ammeter — Type 2011 Class 0.5 (YEW) or equivalent
P1: Probe — P6021 (Tektronix) or equivalent
L: Equivalent Load — 170KΩ+5pF

4. Recommended Equivalent Load

Equivalent Resistive Load: 150 ~ 190k

Parasitic Capacitance: 3 ~ 7pFΩ

5. Environmental Condition

a. Temperature

Operating Temperature: 0 ~ 55°C

Storage Temperature: −20 ~ 70°C

b. Humidity

Operating Humidity: 20 ~ 80%

Storage Humidity: 5 ~ 90%

6. Reliability Test Item

Item	Specification
High Temperature Storage	Ta=70°C 240H
Low Temperature Storage	Ta=−40°C 240H
High Temperature and Humidity Storage	Ta=55°C 95% 240H
High Temperature Operation	Ta=55°C Vin=14V Iout=3.0mArms 500H (with equivalent load)
Vibration	Acceleration 3G, Frequency 10~55Hz, Sweep 45 min, 3 axis, 3 times
Shock	Acceleration 80G, Acting Time 11 ms 3 axis, 3 times

7. Precaution for Handling

Applying excessive shock or bending the unit may cause component damage.
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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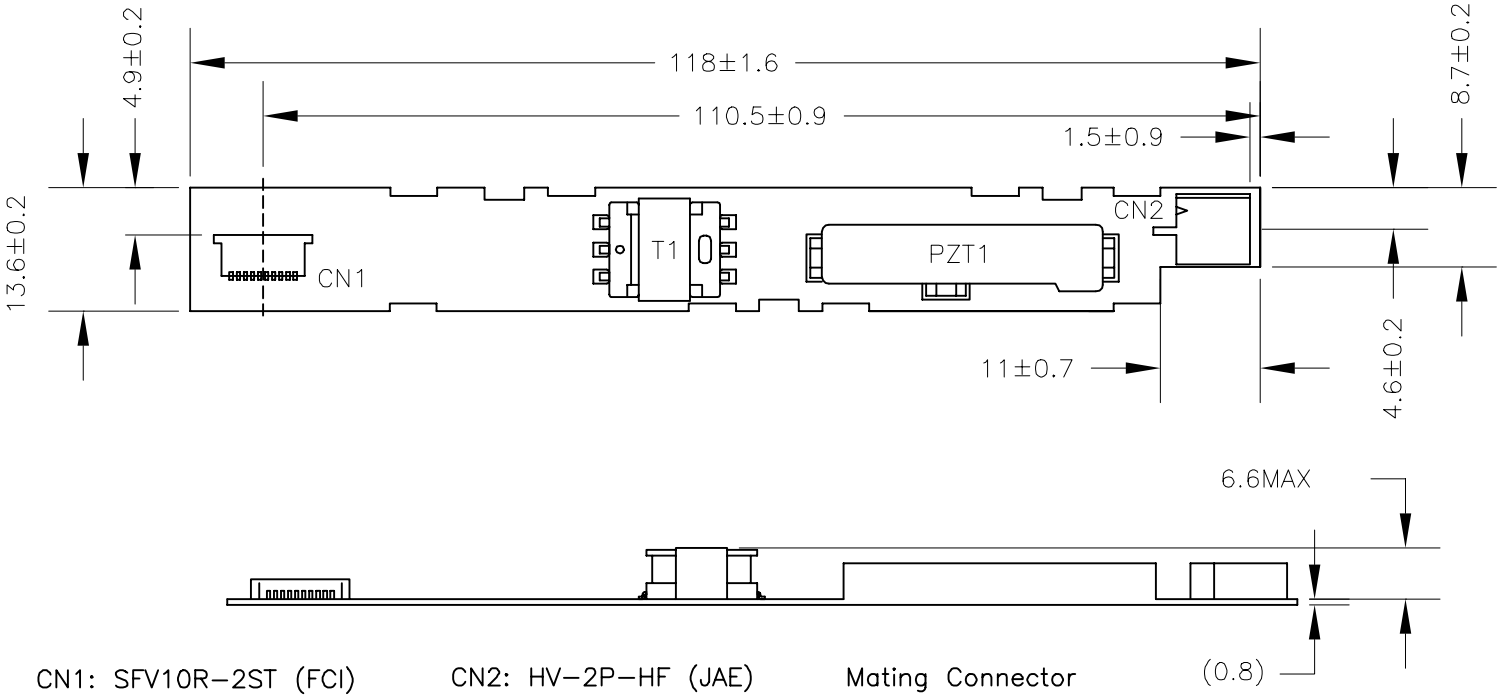
8. Outline Dimensions

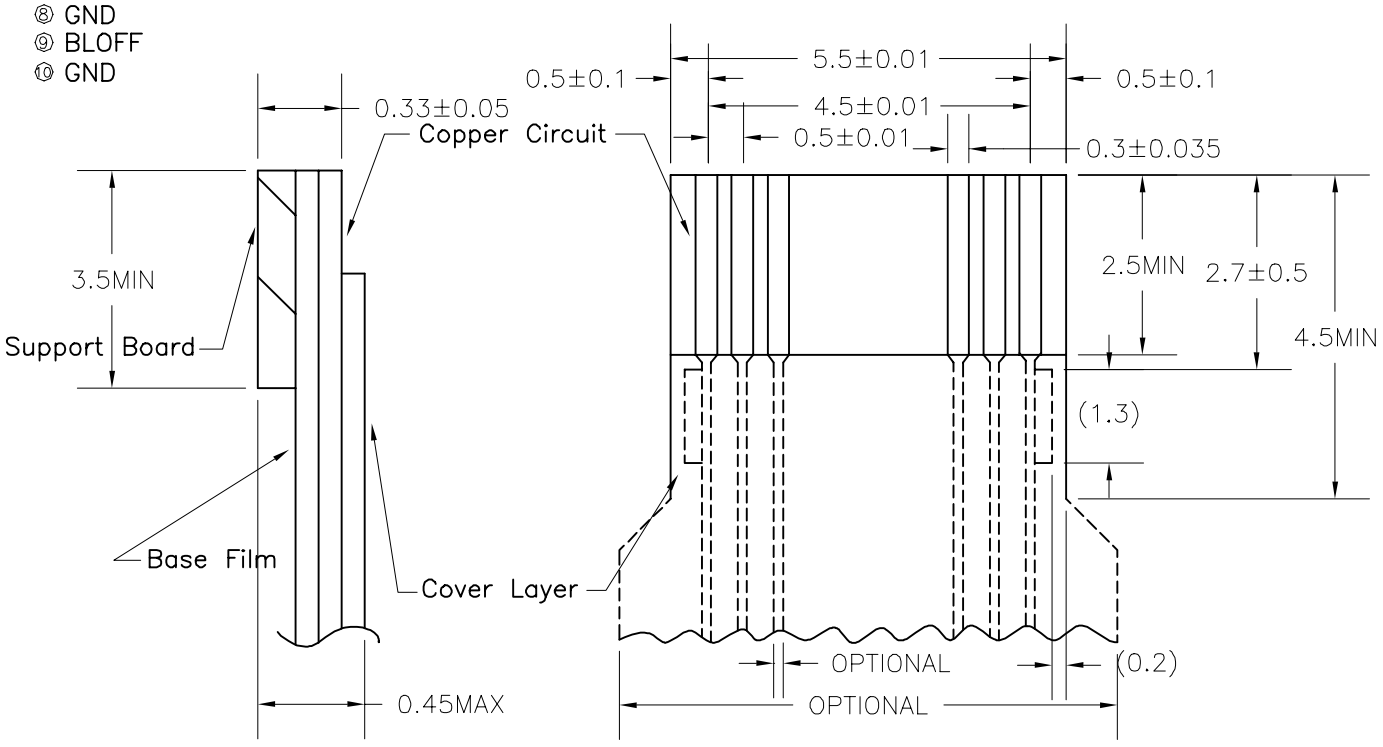


CN1: SFV10R−2ST (FCI)
① GND
② GND
③ NC
④ Vin
⑤ Vin
⑥ NC
⑦ NC
⑧ GND
⑨ BLOFF
⑩ GND

CN2: HV−2P−HF (JAE)
① HOT
② COLD

Mating Connector
HV−2S−C1 (Housing)
IL−2−C1−A−7000 (Contact)

Recommended FPC dimensions for CN1



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