Power Supplies

DC to AC Inverters
Connector type, Dimming, 2W, For 1 Bulb

CXA Series CXA-K0505-VJL

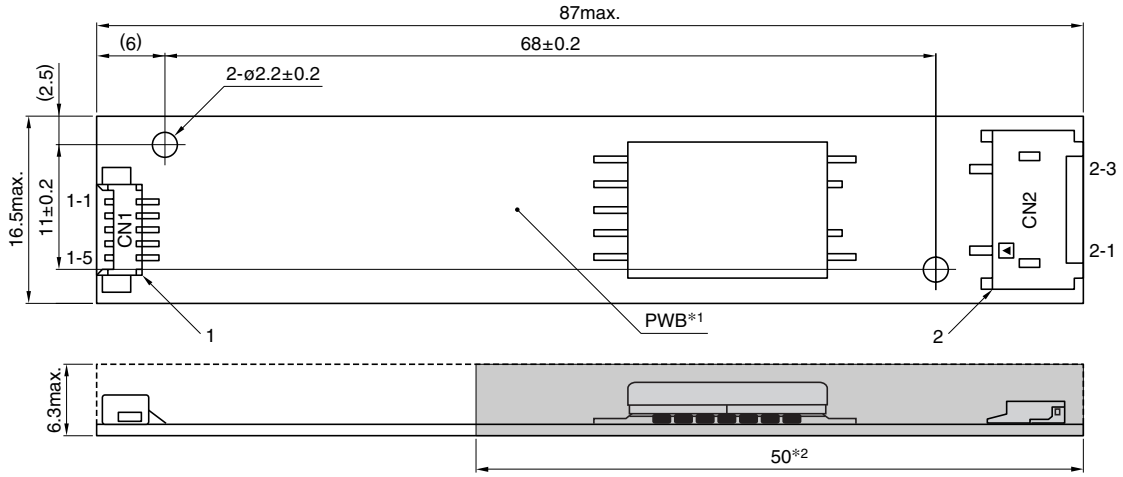
FEATURES

- The CXA-K0505-VJL is an inverter for cold cathode fluorescent lamps and features a built-in dimmer.
- Because they employ advanced output current control, fluctuations in input voltage, load, and distributed capacitance have virtually no effect on brightness.
- Output open and short circuit conditions result in no damage, heat generation, or other difficulties.
- The bottom of the board has a flat structure that facilitates insulation.
- These parts are ultra-thin with a maximum thickness of only 6.3mm.
- Safe design that includes a built-in overcurrent protection element.

TEMPERATURE AND HUMIDITY RANGES

Temperature range (°C)	Operating	0 to +60
	Storage	–30 to +85
Humidity range(%)RH		95max. [Maximum wet-bulb temperature 38°C]

SHAPES AND DIMENSIONS



*1 Substrate (PWB: Printed wiring board): Flame retardant material 94V-0(FR-4 or CEM-3) t=0.8mm
*2 ▭: High-voltage generator (The entire surface within a range of 50mm away from the end of the base in the output)

Weight: 9g typ.

Dimensions in mm

		Connector manufacturer's company and type		Symbol
1	Input connector	Morex Japan Co., Ltd.	53261-0590	CN1
2	Output connector	Japan Solderless Terminal Co., Ltd.	SM02(8.0)B-BHS-1	CN2

TERMINAL NUMBERS AND FUNCTIONS

CN1

Terminal No.	Functions	Symbol
CN1-1	Input voltage Edc: 5 to 12V 5V[nom.]	Vin
CN1-2	0V	GND
CN1-3	Remote voltage Edc 0V: off/5 to 12V:on	Vrmt
CN1-4	Brightness dimmer voltage* Edc: 0 to 3V(Maximum brightness on 0V)	Vbr
CN1-5	Used in the internal circuits, do not connect.	N.C.

* Brightness can be controlled by adjusting Vbr within a range of 0 to 3V.

CN2

Terminal No.	Functions		Symbol
CN2-1	Output[High voltage] Irms	2 to 5mA	V_{HIGH}
CN2-2	—	—	N.C.
CN2-3	Output[Low voltage]	(2V)	V_{LOW}

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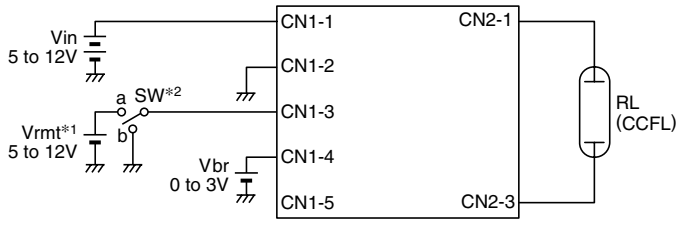
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ELECTRICAL CHARACTERISTICS

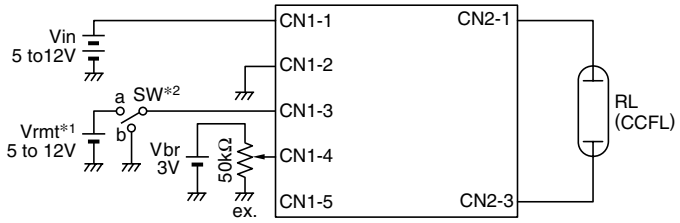
Items	Unit	Symbol	Specifications			Conditions				Brightness
			min.	typ.	max.	Vin(V)	Vbr(V)	Ta(°C)	RL(kΩ)	
Output current Irms	mA	Iout	4.1	5	5.9	5 to 12	0	0 to +50	60 to 80	Maximum
			4.5	5	5.5	5	0	23±5	70	Maximum
			1.5	2	2.5	5	3	23±5	140	Minimum
Input current Idc	A	Iin	—	0.5	0.66	5 to 12	0	0 to +50	60 to 80	
Oscillation frequency	kHz	FL	35	40	45	5 to 12	0	0 to +50	60 to 80	
Open circuit output voltage Erms	V	Vopen	900	1100	—	5 to 12	0	0 to +50	∞	

TYPICAL CONNECTIONS

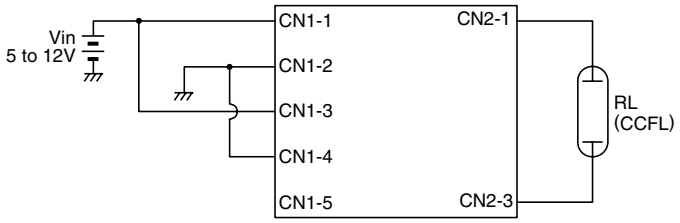
EXAMPLE OF VOLTAGE DIMMER CONTROL



EXAMPLE OF POTENTIOMETER DIMMER CONTROL



NO DIMMER CONTROL



*1 Vrmt (remote voltage) shall be ON after Vin was ON.

*2 SW a:on, b:off

BRIGHTNESS DIMMER VOLTAGE-OUTPUT CURRENT CHARACTERISTICS

