TDK

DC to AC Inverters
Connector type, Dimming, 5W, for 2 Bulbs

Conformity to RoHS Directive

CXA Series CXA-M1212-RJL

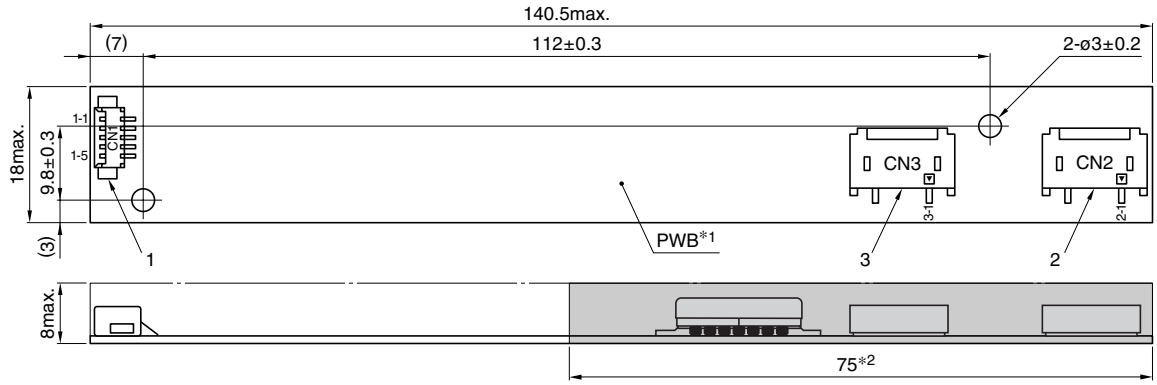
FEATURES

- The CXA-M1212-RJL 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.
- Safe design that includes a built-in overcurrent protection element.
- Insulation is simplified due to flat backside surface of board.
- It is a product conforming to RoHS directive.

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 UL94V-0(FR-4 or CEM-3) t=1mm

*2 ▭: High-voltage generator (The entire surface within a range of 75mm away from the end of the base in the output)

Weight: 15.5g typ.

Dimensions in mm

		Connector manufacturer's company and type		Symbol
1	Input connector	Molex Japan Co., Ltd.	53261-0571	CN1
2	Output connector	Japan Solderless Terminal Co., Ltd.	SM02(8.0)B-BHS-1	CN2
3	Output connector	Japan Solderless Terminal Co., Ltd.	SM02(8.0)B-BHS-1	CN3

TERMINAL NUMBERS AND FUNCTIONS

No.CN1

Terminal No.	Functions	Symbol
CN1-1	Input voltage Edc: 9.6 to 14.4V 12V[nom.]	Vin
CN1-2	0V	GND
CN1-3	Remote voltage Edc 0V: off/5 to 14.4V:on	Vrmt
CN1-4	Brightness dimmer voltage* Edc: 0 to 50kΩ (Maximum brightness on 50kΩ)	VR
CN1-5		

* Brightness can be controlled by adjusting VR within a range of 0 to 50kΩ.

CN2

Terminal No.	Functions		Symbol
CN3-1	Output 1[High voltage] Irms	2 to 6mA	V_{HIGH1}
CN3-2	—	—	N.C.
CN3-3	Output 1[Low voltage]	(2V)	V_{LOW1}

CN3

Terminal No.	Functions		Symbol
CN3-1	Output 2[High voltage] Irms	2 to 6mA	V_{HIGH2}
CN3-2	—	—	N.C.
CN3-3	Output 2[Low voltage]	(2V)	V_{LOW2}

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

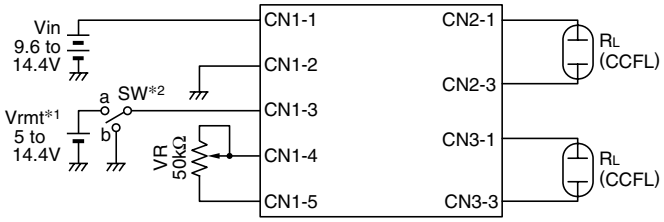
CXA-M1212-RJL

ELECTRICAL CHARACTERISTICS

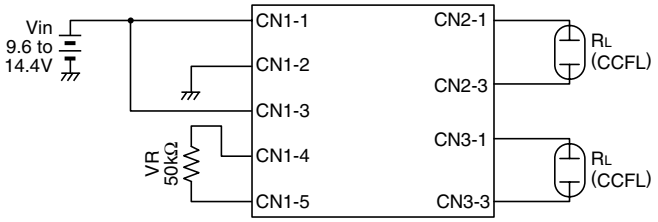
Items	Unit	Symbol	Specifications			Conditions				Brightness
			min.	typ.	max.	Vin(V)	VR(kΩ)	Ta(°C)	RL(kΩ)	
Output current Irms	mA	Iout1	5.3	6	6.7	9.6 to 14.4	50	0 to +60	50 to 70	Maximum
		Iout2	5.3	6	6.7	9.6 to 14.4	50	0 to +60	50 to 70	Maximum
		Iout1	5.5	6	6.5	12	50	23±5	60	Maximum
		Iout2	5.5	6	6.5	12	50	23±5	60	Maximum
		Iout1	1.7	2	2.3	12	0	23±5	180	Minimum
		Iout2	1.7	2	2.3	12	0	23±5	180	Minimum
Input current Idc	A	Iin	—	0.47	0.75	9.6 to 14.4	0 to 50	0 to +60	50 to 70	
Oscillation frequency	kHz	FL	33	39	45	9.6 to 14.4	50	0 to +60	50 to 70	
Open circuit output voltage Erms	V	Vopen	1400	1500	—	9.6 to 14.4	0 to 50	0 to +60	∞	

TYPICAL CONNECTIONS

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 RESISTANCE-OUTPUT CURRENT CHARACTERISTICS