

DC to DC Converters

Non-insulation, DIP Type

Conformity to RoHS Directive

CRX Series

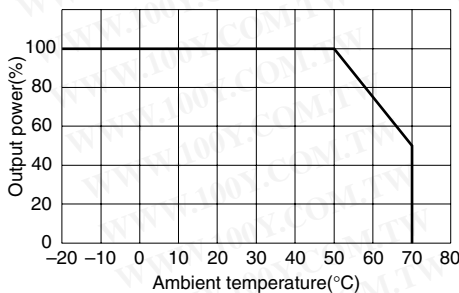
SPECIFICATIONS AND STANDARDS

Part No.		CRX0505N	CRX0512P	CRX0512N	CRX0515P	CRX0515N
Maximum output power	W	0.25	0.3	0.3	0.3	0.3
Input conditions						
Input voltage E _{dc}	V	+4.5 to +5.5(+5typ.)				
Efficiency* ¹	%	70typ.	75typ.	70typ.	75typ.	70typ.
Output characteristics and others						
Output voltage E _{dc}	V	-5	+12	-12	+15	-15
Maximum output current	mA	50	25	25	20	20
Output voltage setting deviation	V	±0.4max.	±0.5max.	±0.5max.	±0.6max.	±0.6max.
Voltage stability	Input variation	%	2	2	3	2
	Load variation* ²	%	2	2	2	2
	Temperature variation* ³	%	5	4	7	4
Ripple E _p * ⁴	mV	100typ.	100typ.	100typ.	100typ.	100typ.
Output capacitor C _o	μF	33	10	10	10	10

*¹ Typical input voltage, maximum output current.*² The value for the variation of 10 to 100% rated output current.*³ The value when the temperature is changed from 0 to +50°C for the rated input and output.*⁴ The value when the proper tantalum capacitor is connected to the output side.

OUTPUT POWER - AMBIENT TEMPERATURE(DERATING)

Derating is necessary when ambient temperature exceeds 50°C.



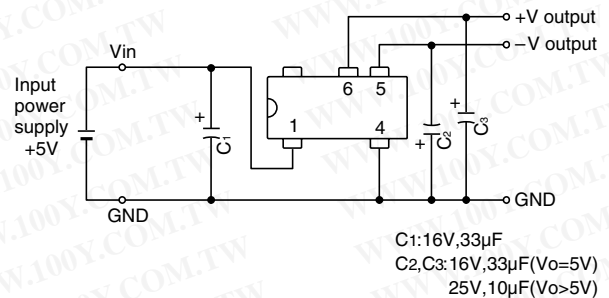
PACKAGING STYLE AND QUANTITY

Exclusive magazine for DC to DC converter's packaging (40 pieces/magazine)

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

PRECAUTIONS

- Parallel operation to increase output current is not possible.
- Input fuse
A 0.15A fuse should be connected to the input.
- Wiring between the input power supply and the converter should be short so as to reduce impedance as much as possible. However, if the input line impedance is high, installation of an input capacitor is recommended.
- Install the components according to the diagram shown below.



SOLDERING CONDITIONS

Dipping: 260±5°C, 10s

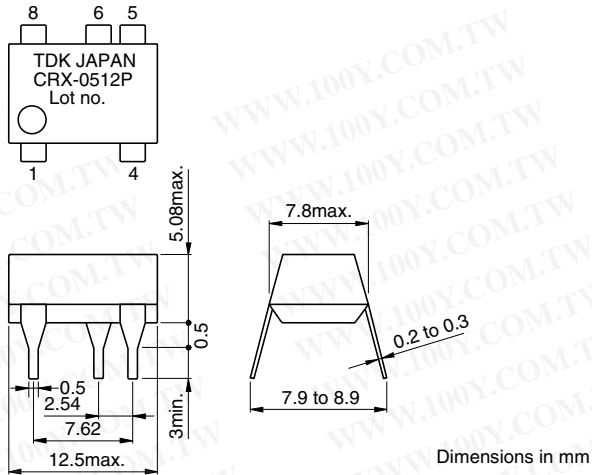
CLEANING CONDITIONS

Solvent: IPA

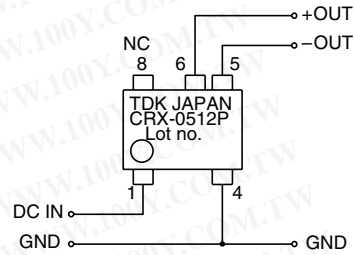
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS



CIRCUIT DIAGRAM



Terminal connection

No.1	Vin(+5V input)
No.4	GND
No.5	-V output(Not connected when +V output, NC)
No.6	+V output(Not connected when -V output, NC)
No.8	NC

Oscillating method: Astable frequency method

Oscillating frequency: Approx. 250kHz[100% load] to approx. 1000kHz[no load]

MTTF: 206Fit[4800000h, 100% load]

COMMON SPECIFICATIONS

Overcurrent protection	No	
Remote ON-OFF	No	
Temperature range	Operating(°C)	-20 to +70[Derating is necessary when operating environment temperature exceed 50°C.]
	Storage(°C)	-40 to +85
Humidity range	Operating(%)RH	20 to 95[Maximum wet-bulb temperature: 38°C, without dewing]
	Storage(%)RH	20 to 95[Maximum wet-bulb temperature: 38°C, without dewing]
External dimensions	12.5×5.08×7.8mm[W×H×D]	
Weight	1g	

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