

# CTC COIL TECHNOLOGY CORPORATION

## DC/DC CONVERTER B2.2WR-xxxxC/DC Series , 2.2W REGULATION

### Features:

- 2:1 Wide Input Range.
- 2.2W DIP-24 Package.
- Internal SMD design.
- High Efficiency up to 85%.
- UL94V-0 Package Material.
- Low Ripple and Noise.
- Continuous Short Circuit Protection, Auto-Restarting.
- 2KVdc Isolation min.
- Input  $\pi$  Filter.
- Operating Temperature Range From - 40 ~ +85 .
- Meet CE EN-60950-1 Certified



**Note:**(1) Add “/H” after Order Code for isolation 4KVdc min.

(2)Metal case could be selected with “ M “after P/N

### Description:

The B2.2WR-xxxxC/DC series is a wide input voltage range of DC-DC converters offering a single and dual regulated output. 24-pin DIP and high efficiency allows an operating temperature of – 40 to +85 .

### Selection Guide

P/N	Input Range	Output Voltage	Output Current	Efficiency Typ.
B2.2WR-053.3C B2.2WR-0505C/DC B2.2WR-0509C/DC B2.2WR-0512C/DC B2.2WR-0515C/DC	4.5 ~ 9 VDC	3.3	600mA	70%
		5 / $\pm 5$	440mA / $\pm 220$ mA	72%
		9 / $\pm 9$	244mA / $\pm 122$ mA	74%
		12 / $\pm 12$	183mA / $\pm 92$ mA	77%
		15 / $\pm 15$	147mA / $\pm 74$ mA	78%
B2.2WR-123.3C B2.2WR-1205C/DC B2.2WR-1209C/DC B2.2WR-1212C/DC B2.2WR-1215C/DC	9 ~ 18VDC	3.3	600mA	74%
		5 / $\pm 5$	440mA / $\pm 220$ mA	78%
		9 / $\pm 9$	244mA / $\pm 122$ mA	81%
		12 / $\pm 12$	183mA / $\pm 92$ mA	83%
		15 / $\pm 15$	147mA / $\pm 74$ mA	84%
B2.2WR-243.3C B2.2WR-2405C/DC B2.2WR-2409C/DC B2.2WR-2412C/DC B2.2WR-2415C/DC	18 ~ 36VDC	3.3	600mA	76%
		5 / $\pm 5$	440mA / $\pm 220$ mA	79%
		9 / $\pm 9$	244mA / $\pm 122$ mA	82%
		12 / $\pm 12$	183mA / $\pm 92$ mA	84%
		15 / $\pm 15$	147mA / $\pm 74$ mA	85%
B2.2WR-483.3C B2.2WR-4805C/DC B2.2WR-4809C/DC B2.2WR-4812C/DC B2.2WR-4815C/DC	36 ~72VDC	3.3	600mA	78%
		5 / $\pm 5$	440mA / $\pm 220$ mA	80%
		9 / $\pm 9$	244mA / $\pm 122$ mA	83%
		12 / $\pm 12$	183mA / $\pm 92$ mA	85%
		15 / $\pm 15$	147mA / $\pm 74$ mA	85%

## Electrical Specifications

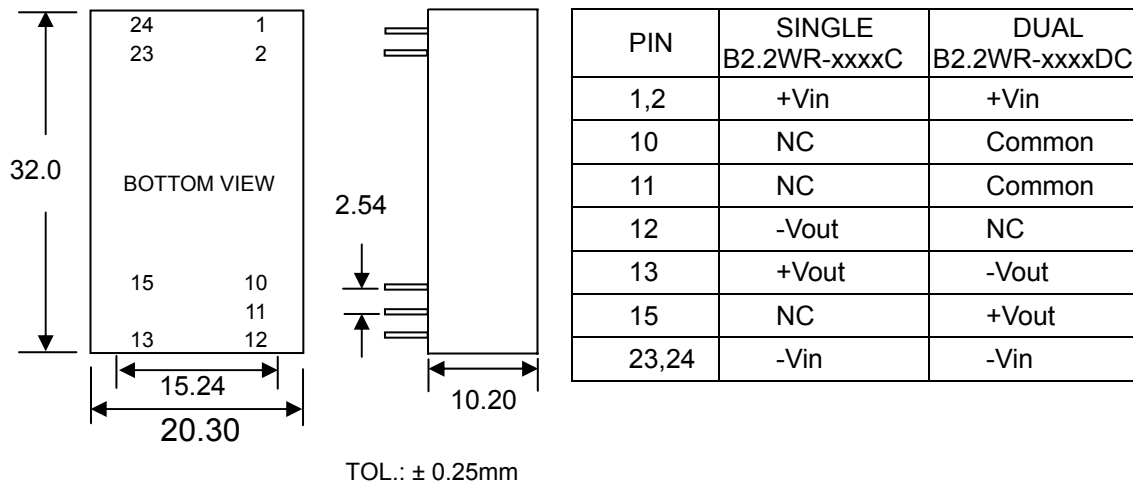
Input Filter	π type.			
Voltage set accuracy		MIN.	TYP.	MAX.
			±1%	±2%
Line Regulation	Low line to High line @Max. load			0.3%
Load Regulation	20% ~ 100% load			0.6%
Ripple & Noise @ 20MHz BW <small>Note 1</small>				50mVp-p
Operating Temperature		-40		+85
Storage Temperature		-50		+125
Short-Circuit Protection	Continuous , Auto Restart			
Operating Frequency (Pulse Frequency Modulation,PFM)	Vin = Nominal Input	110KHz		
Isolation Test Voltage	Tested for 1 second Min.	MIN.	TYP.	MAX.
		2000Vdc		
Isolation Capacity			40pF	
Isolation Resistance		1GΩ		
Humidity				95%
MTBF ( MIL-HDBK-217F)			1.1x10 <sup>6</sup> hours	
Case Temperature	Vin = Nominal Input @ Ta=25		35	

## Physical Specifications

Case Material	Non conductive Black Plastic
Potting Material	Epoxy( UL94V-0 )
Weight	12.0g

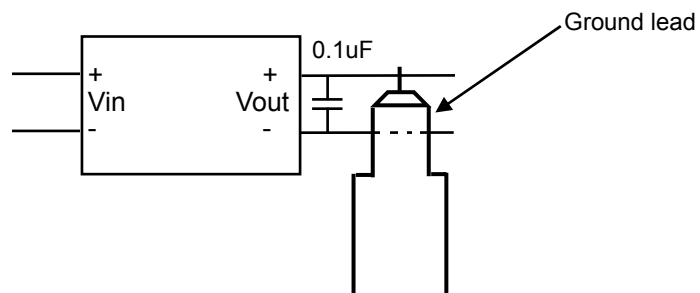
All specifications valid at nominal input voltage, full load @ 25 after warm-up time unless otherwise stated.

## Outline Dimensions



### Note:

- To measure the output ripple & noise with short runs by 0.1uF/ 50V @ 20MHz nominal input and full load. Please see as below :



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