

CTC COIL TECHNOLOGY CORPORATION

DC/DC CONVERTER B3WR-xxxxC/DC Series , 3W REGULATION

Features:

- 2:1 Wide Input Range.
- 3W DIP-24 Package.
- Internal SMD design.
- High Efficiency up to 86%.
- UL94V-0 Package Material.
- Low Ripple and Noise.
- Continuous Short Circuit Protection, Auto-Restarting.
- 2KVdc Isolation min.
- Input π 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 B3WR-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 except the 4.5 ~ 9V input voltage range.

Selection Guide				
P/N	Input Range	Output Voltage	Output Current	Efficiency Typ.
B3WR-053.3C	4.5 ~ 9 VDC	3.3	900mA	66%
B3WR-0505C/DC		5 / ± 5	600mA / ± 300 mA	71%
B3WR-0509C/DC		9 / ± 9	333mA / ± 167 mA	74%
B3WR-0512C/DC		12 / ± 12	250mA / ± 125 mA	75%
B3WR-0515C/DC		15 / ± 15	200mA / ± 100 mA	75%
B3WR-123.3C	9 ~ 18VDC	3.3	900mA	73%
B3WR-1205C/DC		5 / ± 5	600mA / ± 300 mA	75%
B3WR-1209C/DC		9 / ± 9	333mA / ± 167 mA	81%
B3WR-1212C/DC		12 / ± 12	250mA / ± 125 mA	83%
B3WR-1215C/DC		15 / ± 15	200mA / ± 100 mA	84%
B3WR-243.3C	18 ~ 36VDC	3.3	900mA	76%
B3WR-2405C/DC		5 / ± 5	600mA / ± 300 mA	78%
B3WR-2409C/DC		9 / ± 9	333mA / ± 167 mA	82%
B3WR-2412C/DC		12 / ± 12	250mA / ± 125 mA	84%
B3WR-2415C/DC		15 / ± 15	200mA / ± 100 mA	86%
B3WR-483.3C	36 ~ 72VDC	3.3	900mA	78%
B3WR-4805C/DC		5 / ± 5	600mA / ± 300 mA	79%
B3WR-4809C/DC		9 / ± 9	333mA / ± 167 mA	83%
B3WR-4812C/DC		12 / ± 12	250mA / ± 125 mA	85%
B3WR-4815C/DC		15 / ± 15	200mA / ± 100 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	Vin = 5V	-40		+80
	Vin = 12V, 24V, 48V	-40		+85
Storage Temperature		-50		+125
Short-Circuit Protection	Continuous , Auto Restart			
Operating Frequency <small>(Pulse Frequency Modulation,PFM)</small>	Vin = Nominal Input	100KHz		
Isolation Test Voltage	Tested for 1 second Min.	MIN.	TYP.	MAX.
		2000Vdc		
Isolation Capacity			40pF	
Isolation Resistance		1GΩ		
Humidity				95%
MTBF (MIL-HDBK-217F)			10 ⁶ hours	
Case Temperature	Vin = Nominal Input @ Ta=25		40	

Physical Specifications

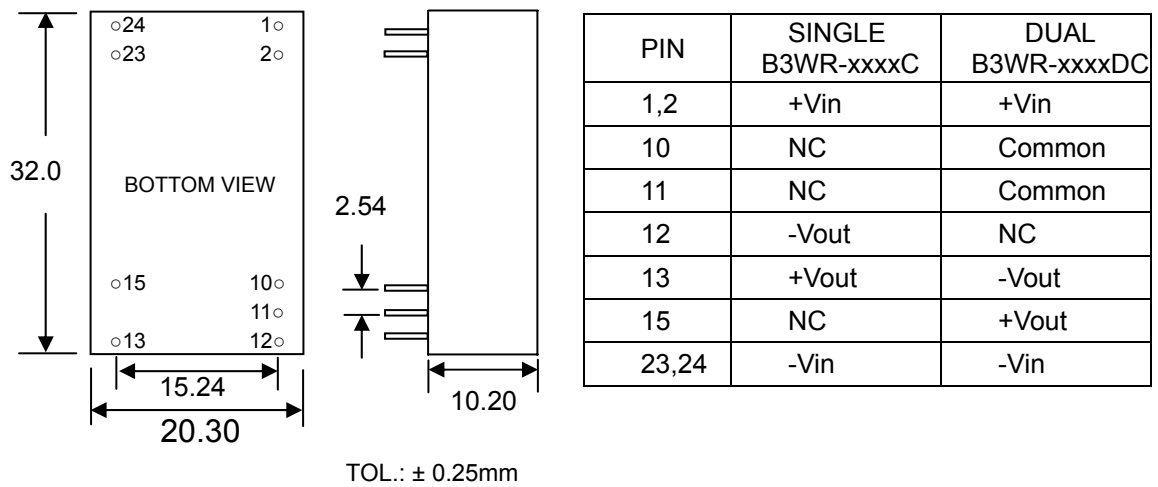
Case Material	Non conductive Black Plastic
Potting Material	Epoxy(UL94V-0)
Weight	12.0g

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

<http://www.ctc-dc-dc.com>

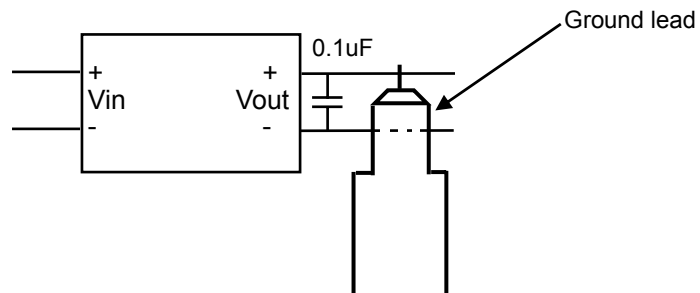
E-mail : ctc@ctc-dc-dc.com

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 :



DEC / 2003 Rev.A