

CTC COIL TECHNOLOGY CORPORATION

DC/DC CONVERTER B3WR4-A Series , 3W REGULATION

Features:

- 4 : 1 Ultra Wide Input Range.
- 3W DIP-24 Package.
- Full 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 π Filter.
- Operating Temperature Range From - 40 to +85 .
- Case Temperature 38 @ Ta = 25
- Meet CE EN-60950-1 Certified



Note : Metal case could be selected with “ M “after P/N
Add “H” after P/N for isolation 4KVdc min.

Description:

The B3WR4 series is a very 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 . The applications include industrial system, communications equipment, battery powered equipments etc....

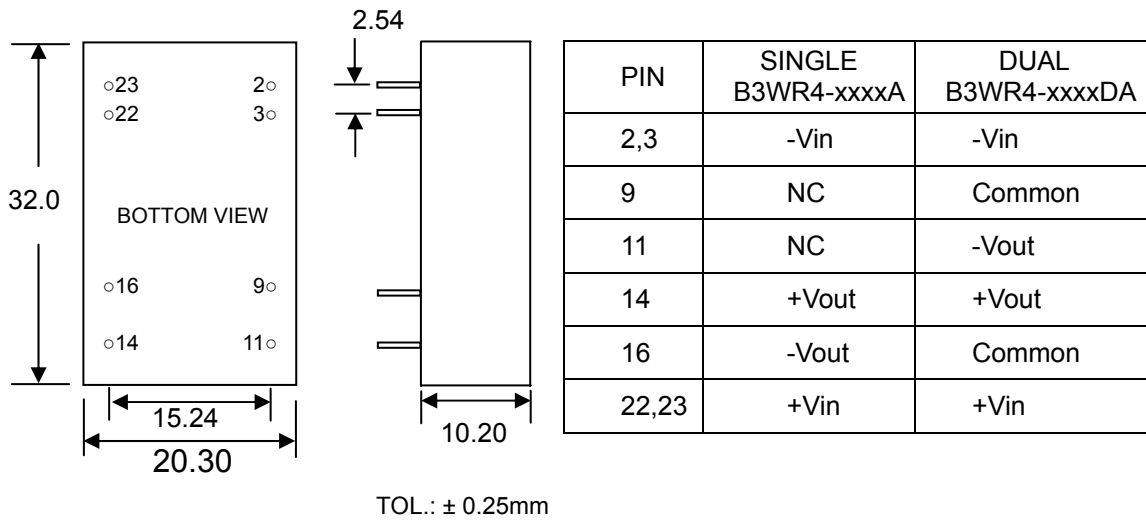
Selection Guide				
P/N	Input Range	Output Voltage	Output Current	Efficiency Typ.
B3WR4-243.3A	9 ~ 36VDC	3.3	850mA	78%
B3WR4-2405A/DA		5 / ± 5	600mA/ ± 300 mA	80%
B3WR4-2409A/DA		9 / ± 9	333mA/ ± 167 mA	82%
B3WR4-2412A/DA		12 / ± 12	250mA/ ± 125 mA	84%
B3WR4-2415A/DA		15 / ± 15	200mA/ ± 100 mA	85%
B3WR4-483.3A	18 ~ 72VDC	3.3	900mA	79%
B3WR4-4805A/DA		5 / ± 5	600mA/ ± 300 mA	81%
B3WR4-4809A/DA		9 / ± 9	333mA/ ± 167 mA	83%
B3WR4-4812A/DA		12 / ± 12	250mA/ ± 125 mA	84%
B3WR4-4815A/DA		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		-40		+85
Storage Temperature		-50		+125
Short-Circuit Protection	Continuous , Auto-Restarting			
Operating Frequency (Pulse Frequency Modulation,PFM)	Vin = Nominal Input	160KHz		
Isolation Test Voltage	Tested for 1 second Min.	MIN.	TYP.	MAX.
		2000Vdc		
Isolation Capacity			60pF	
Isolation Resistance		1GΩ		
Humidity				95%
MTBF (MIL-HDBK-217F)			10 ⁶ hours	
Case Temperature	Vin = Nominal Input @ Ta=25		38	

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

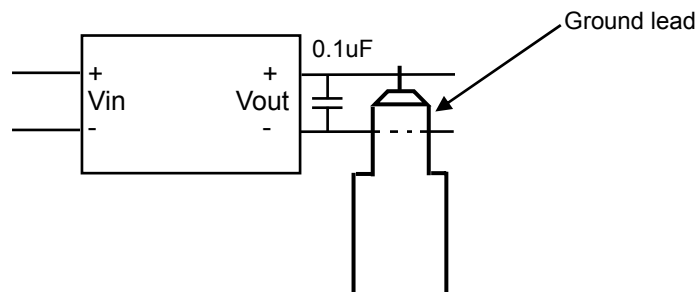
All specifications valid at nominal input voltage, full load @ 25 after warm-up time unless otherwise stated.

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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