

CTC COIL TECHNOLOGY CORPORATION

DC/DC CONVERTER B7.5WR-xxxxAM/DAM Series , 7.5W REGULATION

Features:

- 2:1 Wide Input Range.
- 7.5 W DIP-24 Package.
- Input π Filter.
- Internal SMD design.
- High Efficiency up to 85%.
- 5 Side Shielded Metal Case with Insulated Baseplate.
- Continuous Short Circuit Protection, Auto-Restarting.
- I/O-Isolation 2KVDC min.
- Operating Temperature Range From - 40 ~ +71 .
- Meet CE EN-60950-1 Certified



Description:

The B7.5WR-xxxxAM/DAM 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 +71 .

Selection Guide				
P/N	Input Range	Output Voltage	Output Current	Efficiency Typ.
B7.5WR-123.3AM B7.5WR-1205A / DAM B7.5WR-1209A / DAM B7.5WR-1212A / DAM B7.5WR-1215A / DAM	9 ~ 18VDC	3.3 5 / ± 5 9 / ± 9 12 / ± 12 15 / ± 15	1800mA 1500mA / ± 750 mA 833mA / ± 417 mA 625mA / ± 312 mA 500mA / ± 250 mA	75% 79% 80% 82% 83%
B7.5WR-243.3AM B7.5WR-2405A / DAM B7.5WR-2409A / DAM B7.5WR-2412A / DAM B7.5WR-2415A / DAM	18 ~ 36VDC	3.3 5 / ± 5 9 / ± 9 12 / ± 12 15 / ± 15	1800mA 1500mA / ± 750 mA 833mA / ± 417 mA 625mA / ± 312 mA 500mA / ± 250 mA	76% 80% 81% 83% 84%
B7.5WR-483.3AM B7.5WR-4805A / DAM B7.5WR-4809A / DAM B7.5WR-4812A / DAM B7.5WR-4815A / DAM	36 ~ 72VDC	3.3 5 / ± 5 9 / ± 9 12 / ± 12 15 / ± 15	1800mA 1500mA / ± 750 mA 833mA / ± 417 mA 625mA / ± 312 mA 500mA / ± 250 mA	77% 81% 82% 84% 85%

Electrical Specifications

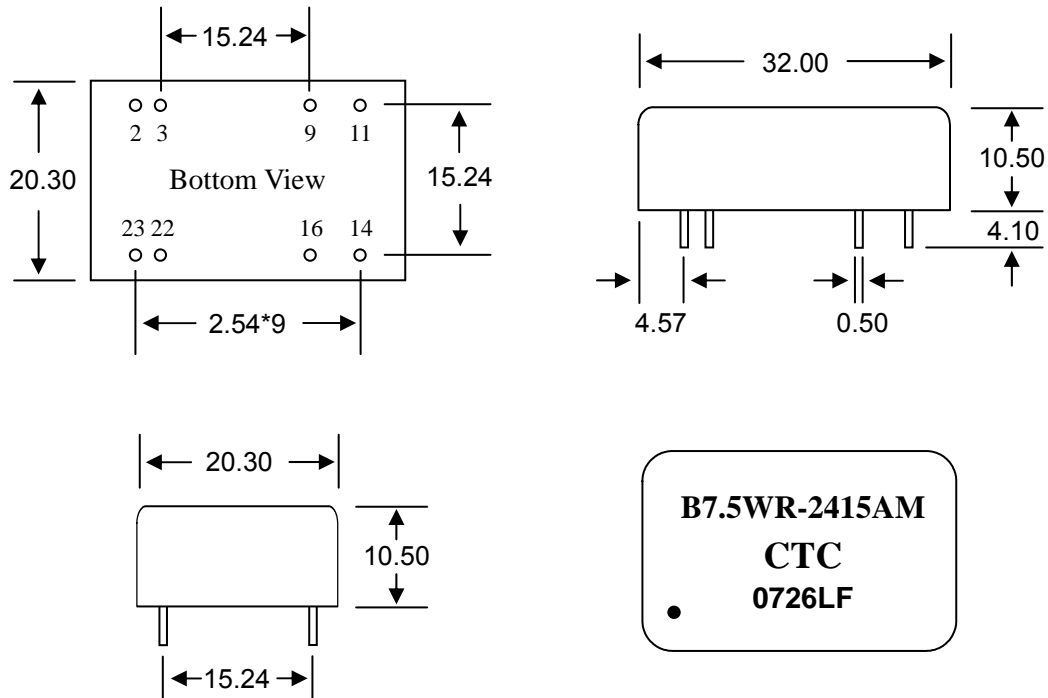
Input Filter	π type.			
Voltage Accuracy		MIN.	TYP.	MAX.
			±1%	±2%
Line Regulation	Low line to High line @Max. load		±0.4%	±1%
Load Regulation	25% ~ 100% load		±0.8%	±1%
Ripple & Noise <small>Note 1</small>	Vin = Nominal Input, 5~15Vout			50mVp-p
	Vin = Nominal Input , 3.3Vout			100mVp-p
Operating Ambient Temperature	Vin = Nominal Input	-40		+71
Storage Temperature		-50		+105
Case Temperature		+100 max		
Short-Circuit Protection	Continuous , Auto Restart			
Operating Frequency <small>(Pulse Frequency Modulation,PFM)</small>	Vin = Nominal Input	240KHz typ.		
Isolation Test Voltage	Tested for 1 second Minute.	MIN.	TYP.	MAX.
		2000Vdc		
Isolation Capacity			50pF	
Isolation Resistance		1GΩ		
Humidity				95%
MTBF <small>(MIL-HDBK-217F)</small>			800x10 ³ hours	

Physical Specifications

Case Material	Nickel-Coated Metal with Non-Conductive Base
Potting Material	Epoxy(UL94V-0)
Weight	16.0g

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

Outline Dimensions

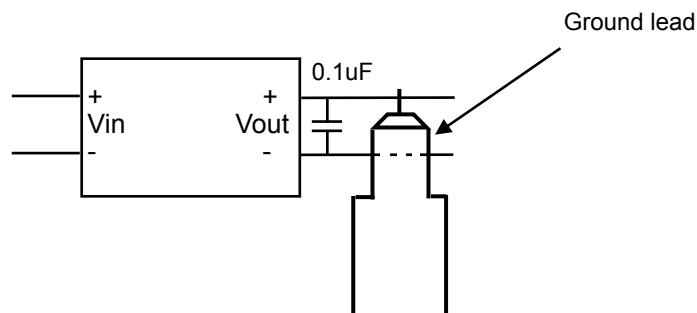


PIN	SINGLE B7.5WR-xxxxAM	DUAL B7.5WR-xxxxDAM
2,3	- Vin	- Vin
9	NC	Common
11	NC	- Vout
14	+Vout	+Vout
16	- Vout	Common
22,23	+Vin	+Vin

TOL.: $\pm 0.25\text{mm}$

Note:

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



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