

**FEATURES :**

- 12W DIL Package
- 4:1 Wide Input Range
- 100% Burned In
- High Efficiency Up To 87%
- Customized Solutions Available
- Remote Control: On/Off
- UL94V-0 Package Material
- Operating Temperature From -40°C to +81°C
- 3 Years Warranty

YUAN DEAN SCIENTIFIC



DC-DC Converter

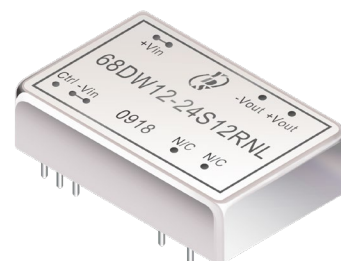
**68DW12 SERIES**

12Watt 1.5KV Isolated

4 : 1 Input Voltage Range

Single & Dual Output

1.25" x 0.8"



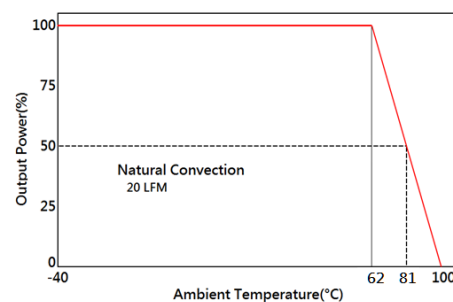
Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage	Input Current (mA TYP)		Output Voltage	Output Current	Efficiency
	Vdc	No Load	Full Load	Vdc	Full Load (mA)	%TYP
68DW12-24S03RNL	9-36	50	573	3.3	3500	84
68DW12-24S05RNL	9-36	50	588	5	2400	85
68DW12-24S12RNL	9-36	30	575	12	1000	87
68DW12-24S15RNL	9-36	30	575	15	800	87
68DW12-24D05RNL	9-36	30	595	±5	±1200	84
68DW12-24D12RNL	9-36	30	575	±12	±500	87
68DW12-24D15RNL	9-36	30	575	±15	±400	87
68DW12-48S03RNL	18-75	40	286	3.3	3500	84
68DW12-48S05RNL	18-75	40	294	5	2400	85
68DW12-48S12RNL	18-75	30	287	12	1000	87
68DW12-48S15RNL	18-75	30	287	15	800	87
68DW12-48D05RNL	18-75	30	298	±5	±1200	84
68DW12-48D12RNL	18-75	30	287	±12	±500	87
68DW12-48D15RNL	18-75	30	287	±15	±400	87

**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Filter			PI Network		

**Temperature Derating Graph**



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TEL : 886-6-3842899 FAX : 886-6-3843288  
E-MAIL : ydsweb@yds.com.tw

Rev:0 2018/10/31

**Output Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Full load@Vin(nom.)			±2	%
Short Circuit Protection	Hiccup, automatic Recovery				
Line Regulation				±0.5	%
Load Regulation	Single Dual (Balance Load)			±0.5 ±0.5	%
Cross Regulation	Dual (25% To 100% Load)			±5	%
Ripple & Noise	Output:3-15V TYPES BW=DC To 20MHz			100	mVp-p
	Output > 15V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	25% load step change		350		us

**General Specifications**

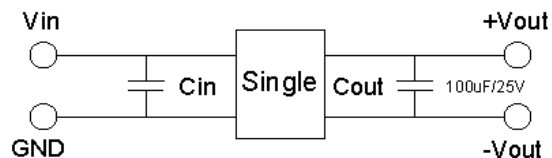
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1500		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature	With derating	-40		81	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	Nickel coated copper with no-conductive base				
MTBF	MIL-HDBK-217F @25°C	900000			Hours
Weight			17.5		g
Dimensions		31.6x20.1x10.0			mm

**Part Number**

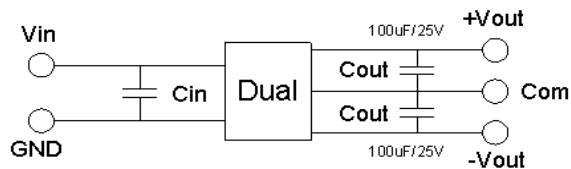
68DW12 - 24 S 05 R NL  
 A B C D E F

- A: Series
- B: Input Voltage
- C: Single Output (S),Dual (D)
- D: Output Voltage
- E: Regulated(R)
- F: RoHs Version

**Recommended Test Circuit**

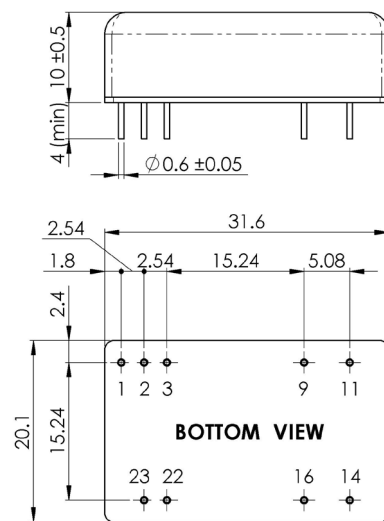


24V&48V: Cin 10uF,100V



24V & 48V :Cin 10uF,100V

**Dimensions**



Unit : mm  
 Tolerance : XX.X ±0.5 , XX.XX ±0.25

**PIN Assignment**

Pin	1	2,3	9	11	14	16	22,23
Single	Remote ON/OFF	-Vin	NC	NC	+Vout	-Vout	+Vin
Dual	Remote ON/OFF	-Vin	Common	-Vout	+Vout	Common	+Vin

