

**FEATURES :**

- 10W 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 +84°C
- 3 Years Warranty

YUAN DEAN SCIENTIFIC



DC-DC Converter

68DW10 SERIES

10Watt 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

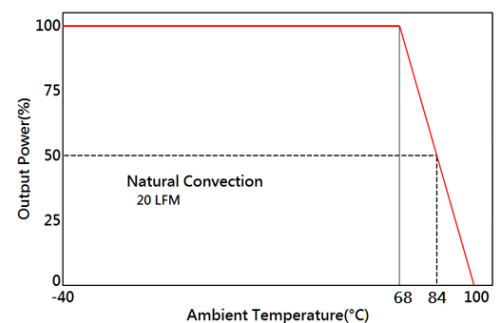
Part Number	Input Voltage	Input Current (mA TYP)		Output Voltage	Output Current	Efficiency
	Vdc	No Load	Full Load	Vdc	Full Load (mA)	%TYP
68DW10-24S03RNL	9-36	50	491	3.3	3000	84
68DW10-24S05RNL	9-36	50	484	5	2000	86
68DW10-24S12RNL	9-36	30	484	12	833	86
68DW10-24S15RNL	9-36	30	487	15	670	86
68DW10-24D05RNL	9-36	30	496	±5	±1000	84
68DW10-24D12RNL	9-36	30	483	±12	±420	87
68DW10-24D15RNL	9-36	30	489	±15	±340	87
68DW10-48S03RNL	18-75	30	246	3.3	3000	84
68DW10-48S05RNL	18-75	30	242	5	2000	86
68DW10-48S12RNL	18-75	20	242	12	833	86
68DW10-48S15RNL	18-75	20	243	15	670	86
68DW10-48D05RNL	18-75	20	248	±5	±1000	84
68DW10-48D12RNL	18-75	20	241	±12	±420	87
68DW10-48D15RNL	18-75	20	244	±15	±340	87



**Input Specifications**

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

**Temperature Derating Graph**



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

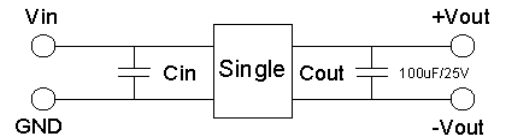
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1500		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature	With derating	-40		84	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	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

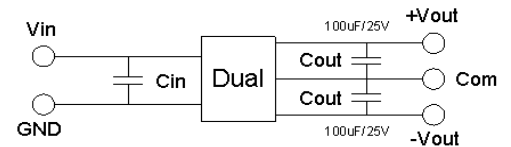
68DW10 - 24 S 03 R NL  
A B C D E F

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

Recommended Test Circuit

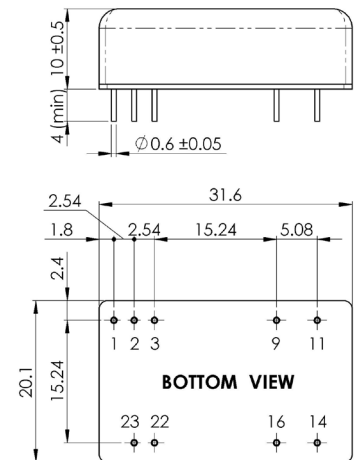


24V&48V: Cin 10uF,100V



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

