

**Wide Input Voltage Range 5-6 Watt Dc-Dc Converter**



**FEATURES:**

- 4:1 Wide Input Voltage.
- 5-6 Watt 24PIN DIL Package.
- Efficiency To 80%
- PI Input Filter.
- 1500Vdc Isolation
- MTBF:>1,500,000 hrs
- Operating Temperature:-40°C TO +85°C



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

Part Number	Input Voltage	Output Voltage	Output Current	Input Current		Efficiency
				NO LOAD	FULL LOAD	
	Vdc	Vdc	mA	mA	mA	%TYP
68DW5-24S03RNL	9-36	3.3	1000	7.5	195	70
68DW5-24S05RNL	9-36	5	1000	7.5	265	75
68DW5-24S12RNL	9-36	12	470	7.5	285	80
68DW5-24S15RNL	9-36	15	400	7.5	305	80
68DW5-24D05RNL	9-36	±5	±500	12	265	75
68DW5-24D12RNL	9-36	±12	±230	12	285	80
68DW5-24D15RNL	9-36	±15	±190	12	295	80
68DW5-48S03RNL	18-72	3.3	1000	5	98	70
68DW5-48S05RNL	18-72	5	1000	5	133	75
68DW5-48S12RNL	18-72	12	470	5	145	80
68DW5-48S15RNL	18-72	15	400	5	154	80
68DW5-48D05RNL	18-72	±5	±500	7.5	265	75
68DW5-48D12RNL	18-72	±12	±230	7.5	142	80
68DW5-48D15RNL	18-72	±15	±200	7.5	156	80

**Input Specifications**

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

**Output Specifications**

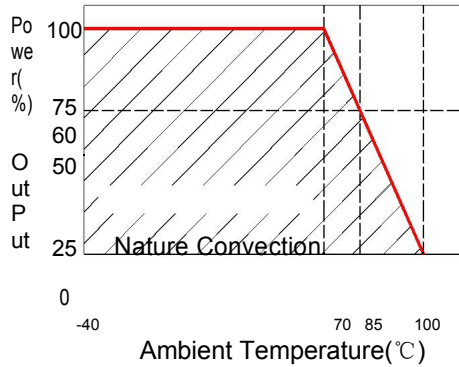
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous				
Line Regulation				±0.5	%
Load Regulation	Single (F.L To 10% Load)			±0.5	%
Load Regulation	Dual (F.L To 1/4 Load)			±1.0	%
Ripple & Noise	BW=DC To 20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us

**General Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			200		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Nickel Coated With Non-Conductive Base or Black Coated Copper With Non-Conductive Base				
Weight			16.2		g
Dimensions			31.80x20.60x10.16		mm

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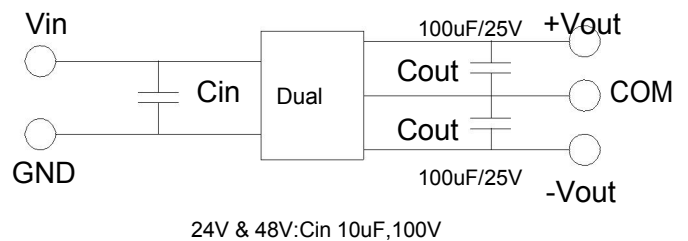
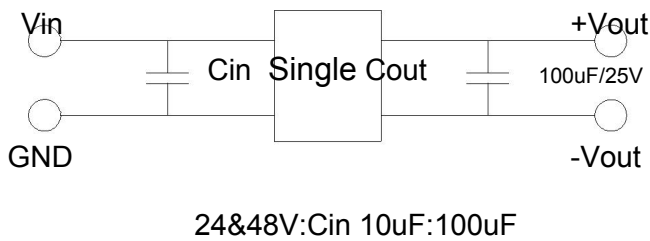
**Temperature Derating Graph**



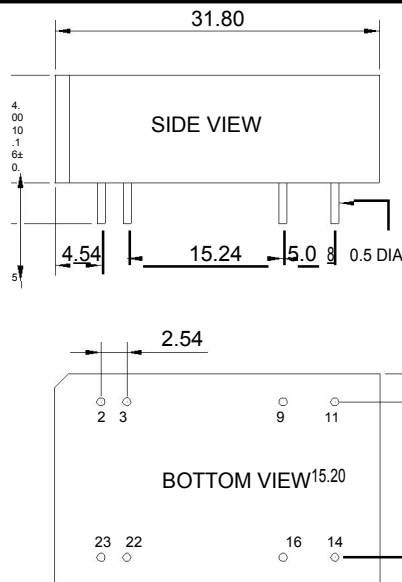
**Part Number**

68DW5 - 24 S 05 R NL  
 A B C D E F  
 A:Series  
 B:Input Voltage  
 C:Single Output  
 D:Output Voltage  
 E:Regulated(R)  
 F:RoHS Version

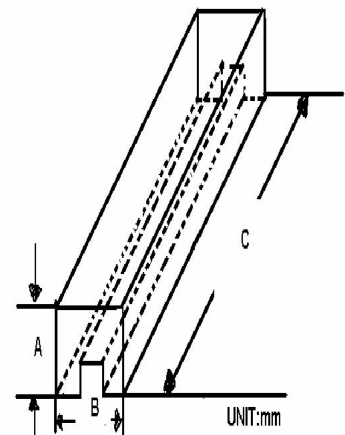
**Recommended Test Circuit**



**Markings and dimensions**



**Packaging**



SIZE(mm)		
A	B	C
18.71	23.00	522

UNIT: mm Unless otherwise specified, all tolerances are  $\pm 0.25$

**PIN Connection**

PIN	2.3	9	11	14	16	22.23
SINGLE	-Vin	NO PIN	NC	+Vout	-Vout	+Vin
DUAL	-Vin	COM	- Vout	+Vout	COM	+Vin