FEATURES :

- 20W DIL Package
- 4:1 Wide Input Range
- 100% Burned In
- High Efficiency Up To 90%
- Customized Solutions Available
- Remote Control:On/Off
- UL94V-0 Package Material
- Operating Temperature From -40℃ To +75℃
- 3 Years Warranty

YUAN DEAN SCIENTIFIC

DC-DC Converter

68DW20 SERIES

20Watt 1.5KV Isolated

4 : 1 Input Voltage Range

Single & Dual Output

1" x 1"



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

Part Number	Input Voltage	Input Current		Output Voltage	Output Current	Efficiency	Capacitor load
	Vdc	No Load (mA TYP)	Full Load (mA TYP)	Vdc	Full Load (mA)	%TYP	uF MAX
68DW20-24S03RNL	9-36	70	719	3.3	4500	86	6600
68DW20-24S05RNL	9-36	70	947	5	4000	88	6600
68DW20-24S12RNL	9-36	25	938	12	1670	89	960
68DW20-24S15RNL	9-36	25	924	15	1330	90	470
68DW20-24D12RNL	9-36	25	936	±12	±833	89	470
68DW20-24D15RNL	9-36	25	937	±15	±667	89	330
68DW20-48S03RNL	18-75	30	360	3.3	4500	86	6600
68DW20-48S05RNL	18-75	30	473	5	4000	88	6600
68DW20-48S12RNL	18-75	15	474	12	1670	88	330
68DW20-48S15RNL	18-75	15	472	15	1330	88	330
68DW20-48D12RNL	18-75	25	468	±12	±833	89	330
68DW20-48D15RNL	18-75	25	468	±15	±667	89	220

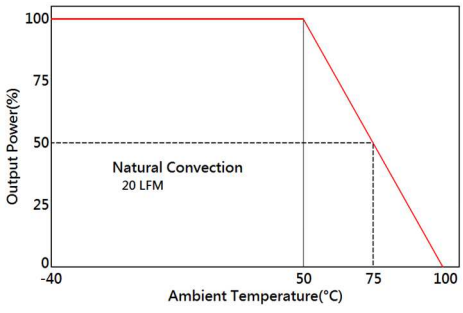
Input Specifications

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

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 ±1	%
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		300		us

Temperature Derating Graph



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Rev:0 2018/10/31

General Specifications

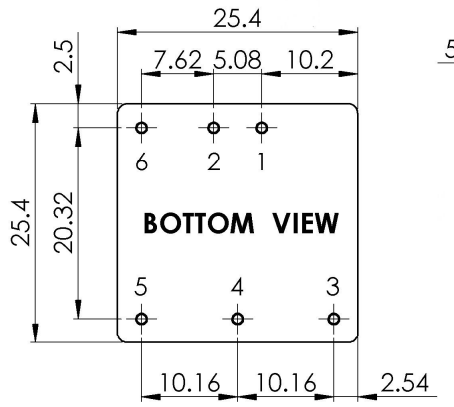
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1500		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			330		KHz
Operating Temperature	With derating	-40		75	℃
Storage Temperature		-55		125	℃
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	Nickel coated copper with no-conductive base				
MTBF	MIL-HDBK-217F@25℃	340000			Hours
Weight			16.5		g
Dimensions			25.4x25.4x10.6		mm

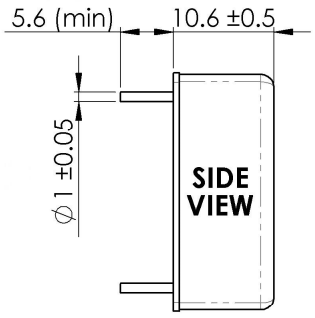
Part Number

68DW20 - 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

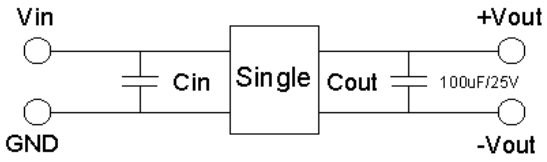
Dimensions



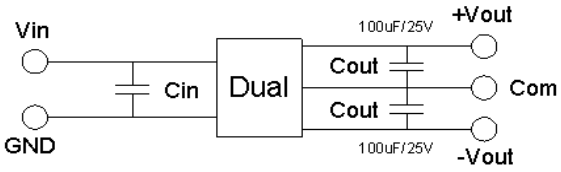


Unit：mm
Tolerance：XX.X ±0.5，XX.XX ±0.25

Recommended Test Circuit



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



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

PIN Assignment

Pin	1	2	3	4	5	6
Single	+Vin	-Vin	+Vout	Trim	-Vout	Remote On/Off
Dual	+Vin	-Vin	+Vout	Com	-Vout	Remote On/Off