

**FEATURES :**

- 20W DIL Package
- 2:1 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°C to +75°C
- 3 Years Warranty

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	Capacitor load
	Vdc	No Load	Full Load	Vdc	Full Load (mA)	%TYP	uF MAX	
68D20-12S03RNL	9-18	120	1456	3.3	4500	85	6600	
68D20-12S05RNL	9-18	120	1894	5	4000	88	6600	
68D20-12S12RNL	9-18	40	1898	12	1670	88	960	
68D20-12S15RNL	9-18	40	1889	15	1330	88	470	
68D20-12D12RNL	9-18	40	1871	±12	±833	89	470	
68D20-12D15RNL	9-18	40	1873	±15	±667	89	330	
68D20-24S03RNL	18-36	70	719	3.3	4500	86	6600	
68D20-24S05RNL	18-36	70	936	5	4000	89	6600	
68D20-24S12RNL	18-36	25	938	12	1670	89	960	
68D20-24S15RNL	18-36	25	934	15	1330	89	470	
68D20-24D12RNL	18-36	25	935	±12	±833	89	470	
68D20-24D15RNL	18-36	25	926	±15	±667	90	330	
68D20-48S03RNL	36-75	30	356	3.3	4500	87	6600	
68D20-48S05RNL	36-75	30	473	5	4000	88	6600	
68D20-48S12RNL	36-75	15	469	12	1670	89	330	
68D20-48S15RNL	36-75	15	467	15	1330	89	330	
68D20-48D12RNL	36-75	25	478	±12	±833	87	330	
68D20-48D15RNL	36-75	25	473	±15	±667	88	220	

**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				2:1	
Filter			LC Network		

YUAN DEAN SCIENTIFIC



DC-DC Converter

**68D20 SERIES**

20Watt 1.5KV Isolated

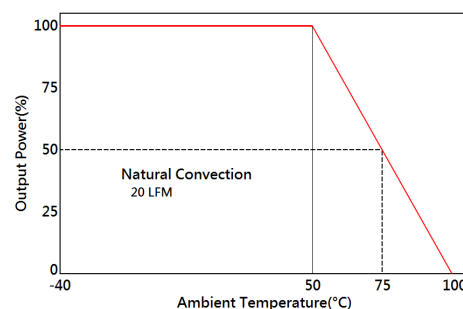
2 : 1 Input Voltage Range

Single & Dual Output

1" x 1"



**Temperature Derating Graph**



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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 ±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

**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	°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	340000			Hours
Weight			16.5		g
Dimensions			25.4x25.4x10.6		mm

**PIN Assignment**

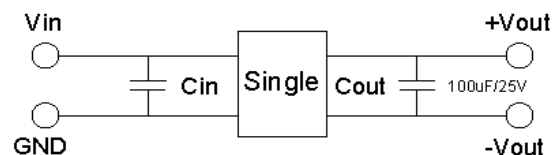
Pin	1	2	3	4	5	6
Single	+Vin	-Vin	+Vout	Trim	-Vout	Remote On/Off
Dual	+Vin	-Vin	+Vout	Com	-Vout	Remote On/Off

**Part Number**

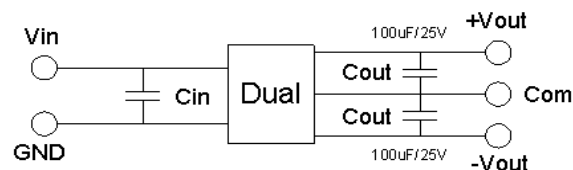
68D20 - 24 S 05 R NL  
A B C D E F

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

**Recommended Test Circuit**

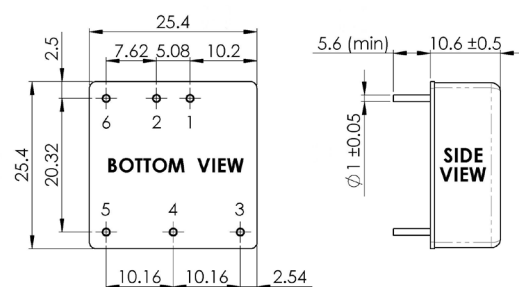


24V&48V:Cin 10uF,100V



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

**Dimensions**



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

