

FEATURES :

- 12W DIL Package
- 2:1 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

68D12 SERIES

12Watt 1.5KV Isolated

2 : 1 Input Voltage Range

Single & Dual Output

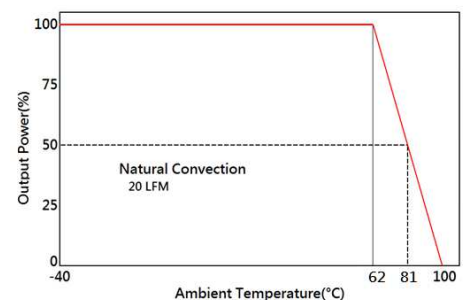
1.25" x 0.8"

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

Part Number	Input Voltage	Input Current		Output Voltage	Output Current	Efficiency
	Vdc	No Load (mA TYP)	Full Load (mA TYP)	Vdc	Full Load (mA)	%TYP
68D12-12S03RNL	9-18	40	1146	3.3	3500	84
68D12-12S05RNL	9-18	40	1176	5	2400	85
68D12-12S12RNL	9-18	40	1149	12	1000	87
68D12-12S15RNL	9-18	40	1149	15	800	87
68D12-12D05RNL	9-18	40	1190	±5	±1200	84
68D12-12D12RNL	9-18	40	1149	±12	±500	87
68D12-12D15RNL	9-18	40	1149	±15	±400	87
68D12-24S03RNL	18-36	30	573	3.3	3500	84
68D12-24S05RNL	18-36	30	588	5	2400	85
68D12-24S12RNL	18-36	30	575	12	1000	87
68D12-24S15RNL	18-36	30	575	15	800	87
68D12-24D05RNL	18-36	30	595	±5	±1200	84
68D12-24D12RNL	18-36	30	575	±12	±500	87
68D12-24D15RNL	18-36	30	575	±15	±400	87
68D12-48S03RNL	36-75	30	286	3.3	3500	84
68D12-48S05RNL	36-75	30	294	5	2400	85
68D12-48S12RNL	36-75	30	287	12	1000	87
68D12-48S15RNL	36-75	30	287	15	800	87
68D12-48D05RNL	36-75	30	298	±5	±1200	84
68D12-48D12RNL	36-75	30	287	±12	±500	87
68D12-48D15RNL	36-75	30	287	±15	±400	87



Temperature Derating Graph



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Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				2:1	
Filter		PI 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			±0.5	%
	Dual(Balance Load)			±0.5	%
Cross Regulation	Dual			±5	%
	(25% To 100% Load)				
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

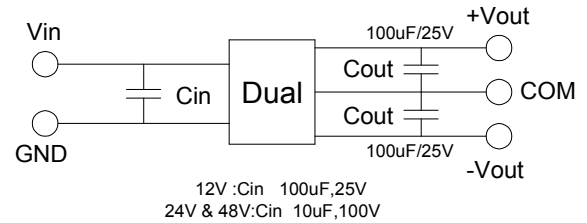
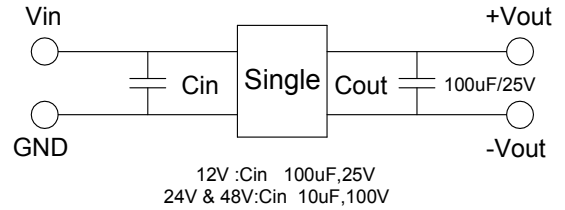
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1500		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature	With derating	-40		81	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	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

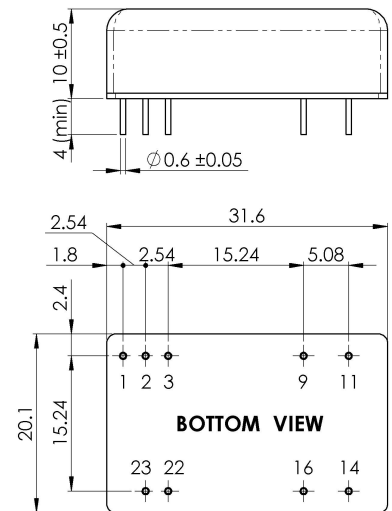
68D12 - 24 S 05 R NL
A B C D E F

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

Recommended Test Circuit



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

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