



Yuan Dean Scientific CO.,LTD

68D8 SERIES

Wide Input Voltage Range 8Watt Dc-Dc Converter



FEATURES:

- 8W DIL PACKAGE
- 2:1 WIDE INPUT RANGE
- 100% BURNED IN
- HIGH EFFICIENCY
- UL94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 1600Vdc Isolation
- Remote Control:On/Off



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
68D8-05S12RNL	4.5-9	120	1927	12	666	83
68D8-05S15RNL	4.5-9	120	1927	15	533	83
68D8-05D12RNL	4.5-9	120	1927	±12	±333	83
68D8-05D15RNL	4.5-9	120	1927	±15	±266	83
68D8-12S03RNL	9-18	50	784	3.3	2424	85
68D8-12S05RNL	9-18	50	784	5	1600	86
68D8-12S12RNL	9-18	50	784	12	666	87
68D8-12S15RNL	9-18	50	784	15	533	87
68D8-12D05RNL	9-18	50	784	±5	±800	85
68D8-12D12RNL	9-18	50	784	±12	±333	87
68D8-12D15RNL	9-18	50	784	±15	±267	87
68D8-24S03RNL	18-36	30	392	3.3	2424	85
68D8-24S05RNL	18-36	30	392	5	1600	86
68D8-24S12RNL	18-36	30	392	12	666	87
68D8-24S15RNL	18-36	30	392	15	533	87
68D8-24D05RNL	18-36	30	392	±5	±800	85
68D8-24D12RNL	18-36	30	392	±12	±333	87
68D8-24D15RNL	18-36	30	392	±15	±267	87
68D8-48S03RNL	36-75	20	196	3.3	2424	85
68D8-48S05RNL	36-75	20	196	5	1600	86
68D8-48S12RNL	36-75	20	196	12	666	87
68D8-48S15RNL	36-75	20	196	15	533	87
68D8-48D05RNL	36-75	20	196	±5	±800	85
68D8-48D12RNL	36-75	20	196	±12	±333	87

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Type				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 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
Ripple & Noise	Output > 15V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	25% load step change		350		us

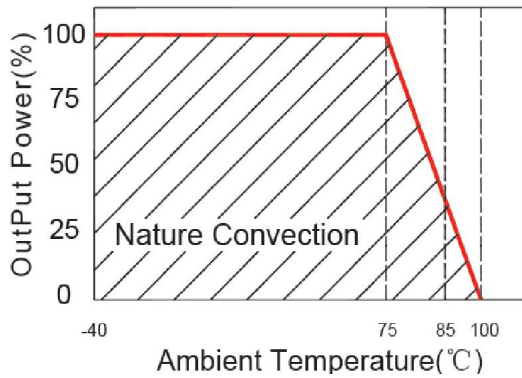


Wide Input Voltage Range 8Watt Dc-Dc Converter

General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1600		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature	With derating	-40		100	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material		Nickel coated copper with no-conductive base			
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			16.2		g
Dimensions		31.6x20.1x10.0			mm

Temperature Derating Graph

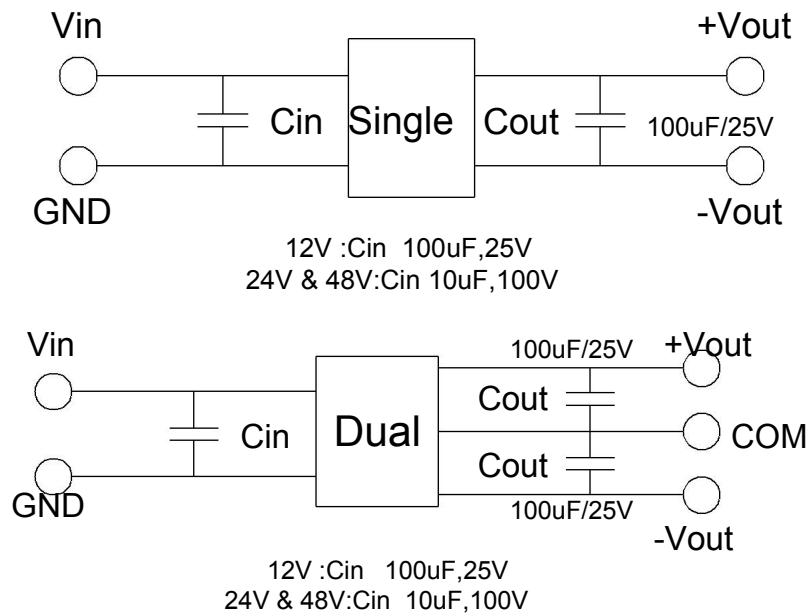
Part Number



68D8 - 12 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



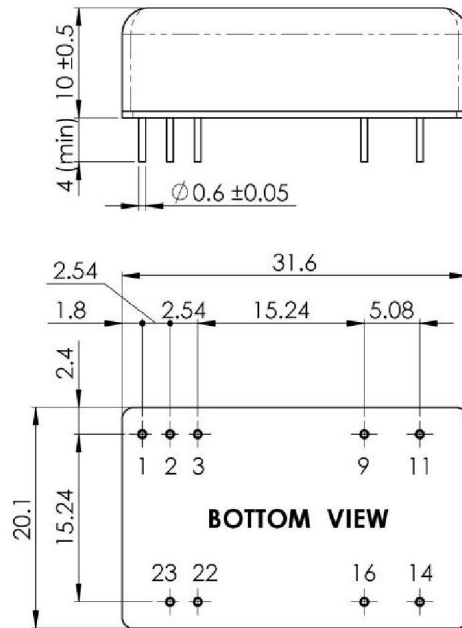


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Markings and Dimensions



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