



# Yuan Dean Scientific CO.,LTD

# 68D15 SERIES

## Wide Input Voltage Range 15Watt Dc-Dc Converter



### FEATURES:

- 15W DIL PACKAGE
- 2:1 WIDE INPUT RANGE
- 100% BURNED IN
- HIGH EFFICIENCY
- UL94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 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
68D15-12S03RNL	9-18	60	1294	3.3	4000	85
68D15-12S05RNL	9-18	60	1453	5	3000	86
68D15-12S12RNL	9-18	30	1420	12	1250	88
68D15-12S15RNL	9-18	30	1420	15	1000	88
68D15-12D12RNL	9-18	30	1420	± 12	± 625	88
68D15-12D15RNL	9-18	30	1420	± 15	± 500	88
68D15-24S03RNL	18-36	50	647	3.3	4000	85
68D15-24S05RNL	18-36	50	718	5	3000	87
68D15-24S12RNL	18-36	20	702	12	1250	89
68D15-24S15RNL	18-36	20	702	15	1000	89
68D15-24D12RNL	18-36	20	710	± 12	± 625	88
68D15-24D15RNL	18-36	20	710	± 15	± 500	88
68D15-48S03RNL	36-75	40	323	3.3	4000	85
68D15-48S05RNL	36-75	40	363	5	3000	86
68D15-48S12RNL	36-75	20	359	12	1250	87
68D15-48S15RNL	36-75	20	351	15	1000	89
68D15-48D12RNL	36-75	20	355	± 12	± 625	88
68D15-48D15RNL	36-75	20	355	± 15	± 500	88

### Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Type				2:1	
Filter		PI Network			

### Output Specifications

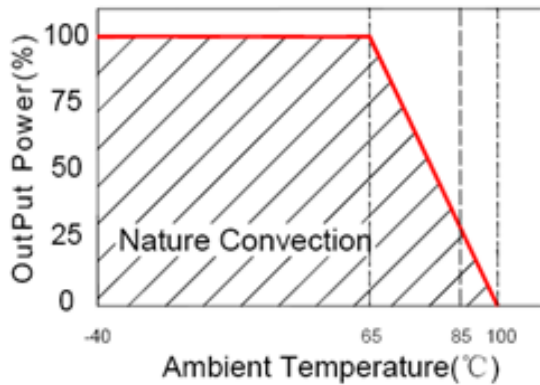
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Full load@Vin(nom.)			±2	%
Short Circuit Protection	Hiccup, automatic Recovery				
Line Regulation				±0.5	%
Load Regulation	Single Dual(Balance Load)			±0.5 ±1	%
Cross Regulation	Dual(25% To 100% Load)			±5	%
Ripple & Noise	Output:3-15V TYPES 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		250		us



## Wide Input Voltage Range 15Watt Dc-Dc Converter

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		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	560000			Hours
Weight			16.5		g
Dimensions		25.4x25.4x10.6			mm

### Temperature Derating Graph

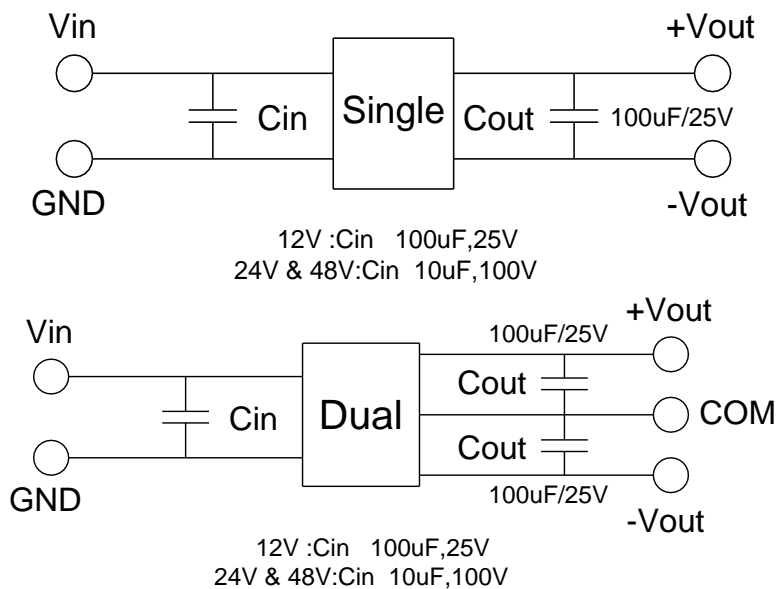


### Part Number

68D15 - 24 S 05 R NL  
 A B C D E F

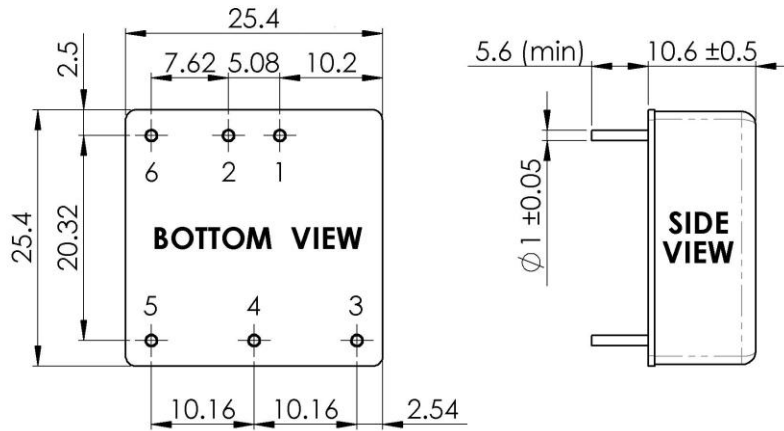
- A : Series
- B : Input Voltage
- C : Single Output(S), DUAL(D)
- D : Output Voltage
- E : Regulated(R)
- F : RoHs Version

### Recommended Test Circuit





### Markings and Dimensions



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

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