

**FEATURES :**

- 8W 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 +87°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
	Vdc	No Load	Full Load	Vdc	Full Load (mA)	%TYP		
68D8-05S12RNL	4.5-9	120	1880	12	666	85		
68D8-05S15RNL	4.5-9	120	1880	15	533	85		
68D8-05D12RNL	4.5-9	120	1880	±12	±333	85		
68D8-05D15RNL	4.5-9	120	1880	±15	±266	85		
68D8-12S03RNL	9-18	50	784	3.3	2424	85		
68D8-12S05RNL	9-18	50	775	5	1600	86		
68D8-12S12RNL	9-18	50	766	12	666	87		
68D8-12S15RNL	9-18	50	766	15	533	87		
68D8-12D05RNL	9-18	50	784	±5	±800	85		
68D8-12D12RNL	9-18	50	766	±12	±333	87		
68D8-12D15RNL	9-18	50	766	±15	±267	87		
68D8-24S03RNL	18-36	30	392	3.3	2424	85		
68D8-24S05RNL	18-36	30	388	5	1600	86		
68D8-24S12RNL	18-36	30	383	12	666	87		
68D8-24S15RNL	18-36	30	383	15	533	87		
68D8-24D05RNL	18-36	30	392	±5	±800	85		
68D8-24D12RNL	18-36	30	383	±12	±333	87		
68D8-24D15RNL	18-36	30	383	±15	±267	87		
68D8-48S03RNL	36-75	20	196	3.3	2424	85		
68D8-48S05RNL	36-75	20	194	5	1600	86		
68D8-48S12RNL	36-75	20	192	12	666	87		
68D8-48S15RNL	36-75	20	192	15	533	87		
68D8-48D05RNL	36-75	20	196	±5	±800	85		
68D8-48D12RNL	36-75	20	192	±12	±333	87		

YUAN DEAN SCIENTIFIC



DC-DC Converter

68D8 SERIES

8Watt 1.6KV Isolated

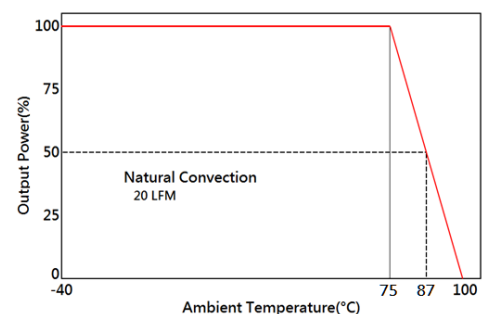
2 : 1 Input Voltage Range

Single & Dual Output

1.25" x 0.8"



Temperature Derating Graph



**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types	Vo, Io Nom			2:1	
Filter	Capacitor				

**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		350		us

**General Specifications**

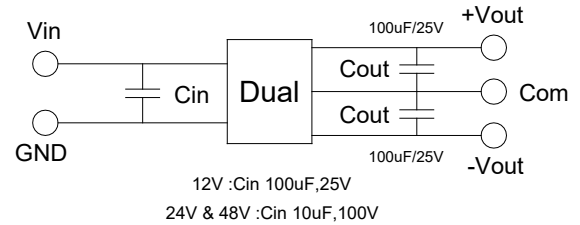
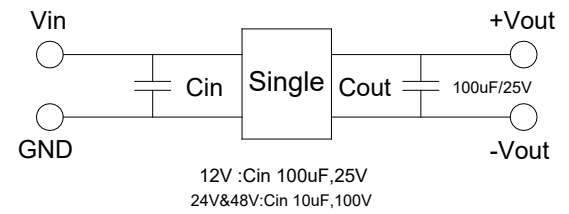
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1600		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature	With derating	-40		87	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	Nickel coated copper with no-conductive base				
MTBF	MIL-HDBK-217F @25°C	1500000			Hours
Weight			16.2		g
Dimensions			31.6x20.1x10.0		mm

**Part Number**

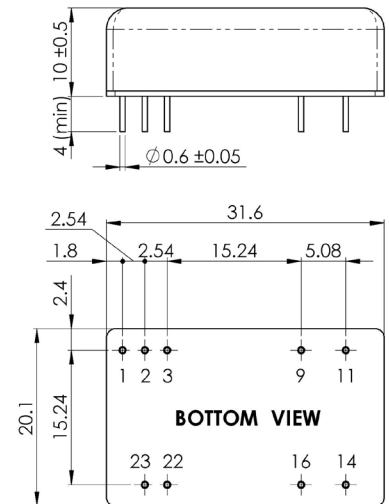
68D8 - 12 S 03 R NL  
A B C D E F

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

**Recommended Test Circuit**



**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

