

FEATURES :

- 10W DIL PACKAGE
- 4:1 WIDE INPUT RANGE
- 100% BURNED IN
- HIGH EFFICIENCY
- UL94V-0 PACKAGE MATERIAL
- CUSTOMIZED SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- Design refer to AAMI/CSA 60601-1,IEC/EN60601-1 3.1 edition
- Medical/Industry/ITE Application

YUAN DEAN SCIENTIFIC



DC-DC Converter

68DW10-M SERIES

10Watt 3KVac Isolated

4 : 1 Input Voltage Range

Single & Dual Output

DIL

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
68DW10-24S03RM	9-36	50	503	3.3	3000	82
68DW10-24S05RM	9-36	50	508	5	2000	82
68DW10-24S12RM	9-36	30	502	12	833	83
68DW10-24S15RM	9-36	30	505	15	670	83
68DW10-24D05RM	9-36	30	502	±5	±1000	83
68DW10-24D12RM	9-36	30	506	±12	±420	83
68DW10-24D15RM	9-36	30	512	±15	±340	83
68DW10-48S03RM	18-75	30	252	3.3	3000	82
68DW10-48S05RM	18-75	30	254	5	2000	82
68DW10-48S12RM	18-75	20	251	12	833	83
68DW10-48S15RM	18-75	20	252	15	670	83
68DW10-48D05RM	18-75	20	251	±5	±1000	83
68DW10-48D12RM	18-75	20	253	±12	±420	83
68DW10-48D15RM	18-75	20	256	±15	±340	83

Input Specifications

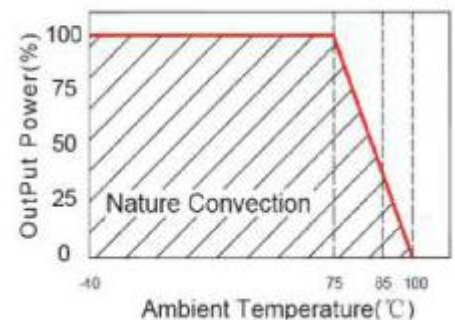
Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	%
Filter			PI Network		

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	%
Load Regulation	Dual(Balance Load)			±0.5	%
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



Temperature Derating Graph



General Specifications

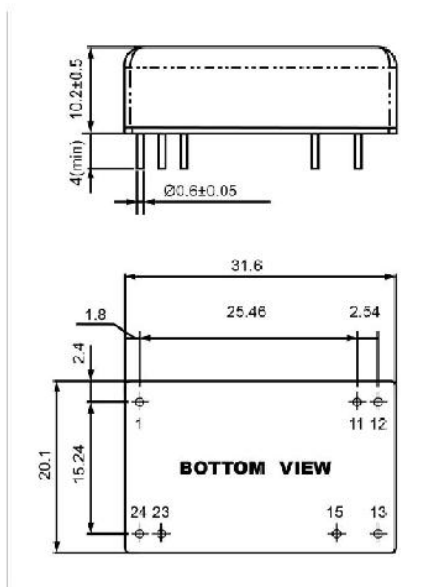
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			3000		Vac
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			400		KHz
Operating Temperature	With derating	-40		100	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material			Plastic		
MTBF	MIL-HDBK-217F@25°C	900000			Hours
Weight			15.5		g
Dimensions			31.6x20.1x10.2		mm

Part Number

68DW10 - 24 S 03 R M
 A B C D E F

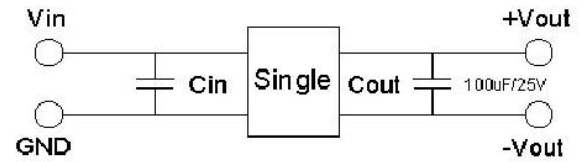
- A: Series
- B: Input Voltage
- C: Single Output(D),Dual(D)
- D: Output Voltage
- E: Regulated (R)
- F: Medical Application

Markings and dimensions

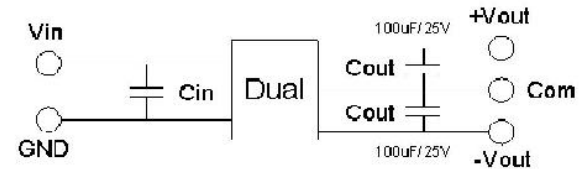


Unit : mm
 Tolerance : XX.X (0.5) , XX.XX (0.25)

Recommended Test Circuit



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



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

PIN Assignment

Pin	1	11	12	13	15	23	24
Single	+Vin	No Pin	-Vout	+Vout	No Pin	-Vin	-Vin
Dual	+Vin	Com	No Pin	-Vout	+Vout	-Vin	-Vin