

**FEATURES :**

- 40 Watt 2"X1" DIL Package
- 4:1Wide Input Voltage
- 100% Burned In
- High Efficiency To 90%
- Customized Solutions Available
- Remote Control:On/Off
- UL94V-0 Package Material
- Operating Temperature:-40°C TO +77°C
- 3 Years Warranty

YUAN DEAN SCIENTIFIC



DC-DC Converter

**99DW-R3 SERIES**

40Watt 1.5KV Isolated

4 : 1 Input Voltage Range

Single & Dual Output

2" x 1"

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

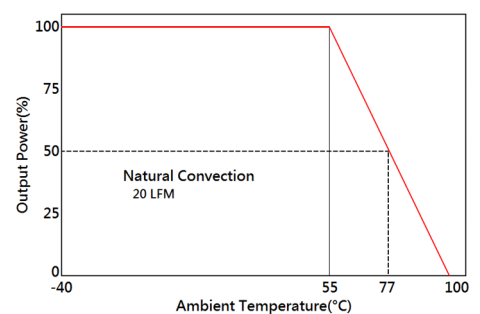
Part Number	Input Voltage		Input Current		Output Voltage		Output Current		Efficiency	Capacitor Load
	Vdc	No Load (mA TYP)	Full Load (mA TYP)	Vdc	Full Load (mA)	%TYP	uF Max			
99DW-24S05R3NL	9-36	90	1851	5	8000	90	10000			
99DW-24S12R3NL	9-36	50	1876	12	3340	89	1800			
99DW-24S15R3NL	9-36	50	1875	15	2670	89	1200			
99DW-24D12R3NL	9-36	50	1897	±12	±1670	88	±1000			
99DW-24D15R3NL	9-36	50	1903	±15	±1340	88	±680			
99DW-48S05R3NL	18-75	60	925	5	8000	90	10000			
99DW-48S12R3NL	18-75	40	927	12	3340	90	1800			
99DW-48S15R3NL	18-75	40	927	15	2670	90	1200			
99DW-48D12R3NL	18-75	40	948	±12	±1670	88	±1000			
99DW-48D15R3NL	18-75	40	951	±15	±1340	88	±680			



**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	
Filter	Pi Network				
Protection	Fuse Recommended				

**Temperature Derating Graph**



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Rev:0 2018/10/31

**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 ±2	%
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		300		us
External Trim Adj. Range				±10	%

**General Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			350		KHz
Operating Temperature	Refer to temperature derating graph (with derating)	-40		77	°C
Humidity	Non Condensing	5		95	%
Cooling	Natural Convection (20LFM)				
Case material	Nickel Coated with Non-Conductive Base				
Weight			40		g
Dimensions			50.8X25.4X11.6		mm
Potting Material			Epoxy (UL94V-0 rated)		
Remote ON/OFF	ON		Open		
	OFF		Short to -Vin		
Isolation Voltage				1500	VDC
MTBF	MIL-HDBK-217F @25°C , Ground Benign	328000			Hours
Storage Temperature		-55		+125	°C
Case Temperature				+105	°C
Isolation Capacitance				1500	pF

**PIN Assignment**

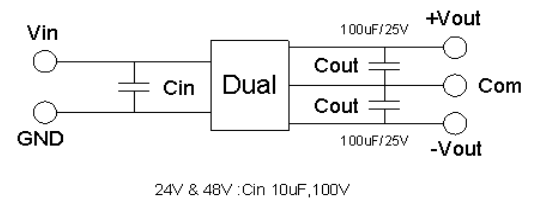
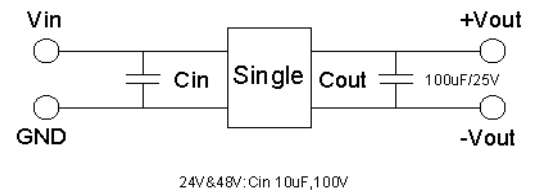
Pin	1	2	3	4	5	6
Single	+Vin	-Vin	Remote On/Off	+Vout	-Vout	Trim
Dual	+Vin	-Vin	Remote On/Off	+Vout	Com	-Vout

**Part Number**

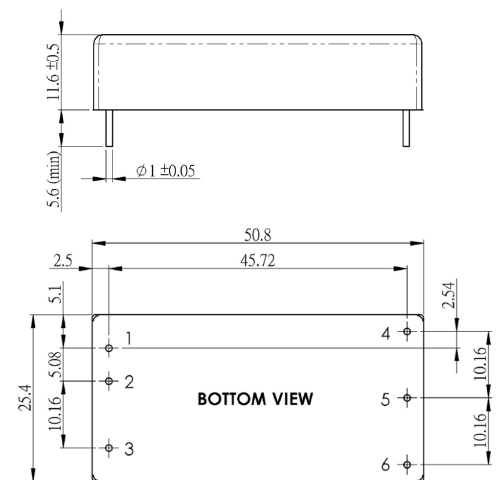
99DW - 24 S 05 R 3 NL  
 A B C D E F G

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

**Recommended Test Circuit**



**Dimensions**



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