



Size: 1.24in x 0.79in x 0.39in (31.6mm x 20.1mm x 10mm)

**FEATURES**

- 4:1 Wide Input Voltage Range
- Through Hole Package
- High Efficiency
- 100% Burned In
- UL94V-0 Package Material
- Short Circuit Protection
- RoHS Compliant
- Customized Solutions Available
- For Medical/Industrial/ITE Applications

**DESCRIPTION**

The DCDW10 series of DC/DC converters offers up to 10 watts of output power in a very compact 1.24" x 0.79" x 0.39" DIL package. This series consists of both single and dual output models with wide 4:1 input voltage range. The DCDW10 series features high efficiency, short circuit protection, and UL94V-0 package material. This series is for medical, industrial, or ITE applications, is RoHS compliant, and has been 100% burned-in. Please contact factory for ordering information.

**MODEL SELECTION TABLE**

Single Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current	Input Current		Efficiency	Output Power
				No Load	Full Load		
DCDW10-24S33	24VDC (9~36VDC)	3.3VDC	2500mA	7mA	414mA	83%	10W
DCDW10-24S05		5VDC	2000mA	7mA	496mA	84%	10W
DCDW10-24S12		12VDC	833mA	7mA	496mA	84%	10W
DCDW10-24S15		15VDC	670mA	7mA	499mA	84%	10W
DCDW10-48S33	48VDC (18~75VDC)	3.3VDC	2500mA	4mA	207mA	83%	10W
DCDW10-48S05		5VDC	2000mA	4mA	248mA	84%	10W
DCDW10-48S12		12VDC	833mA	4mA	248mA	84%	10W
DCDW10-48S15		15VDC	670mA	4mA	249mA	84%	10W

**MODEL SELECTION TABLE**

Dual Output Models

Model Number	Input Voltage Range	Output Voltage	Output Current	Input Current		Efficiency	Output Power
				No Load	Full Load		
DCDW10-24D05	24VDC (9~36VDC)	±5VDC	±1000mA	7mA	496mA	84%	10W
DCDW10-24D12		±12VDC	±420mA	7mA	494mA	85%	10W
DCDW10-24D15		±15VDC	±340mA	7mA	500mA	85%	10W
DCDW10-48D05	48VDC (18~75VDC)	±5VDC	±1000mA	4mA	248mA	84%	10W
DCDW10-48D12		±12VDC	±420mA	4mA	247mA	85%	10W
DCDW10-48D15		±15VDC	±340mA	4mA	250mA	85%	10W

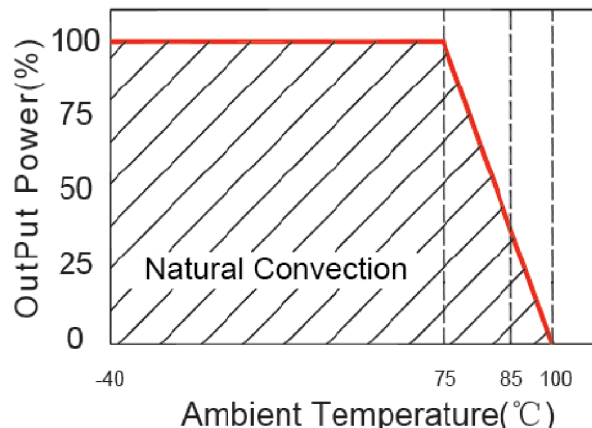
**SPECIFICATIONS**

All specifications are based on 25°C, Nominal Input Voltage, and Rated Output Current unless otherwise noted.  
We reserve the right to change specifications based on technological advances.

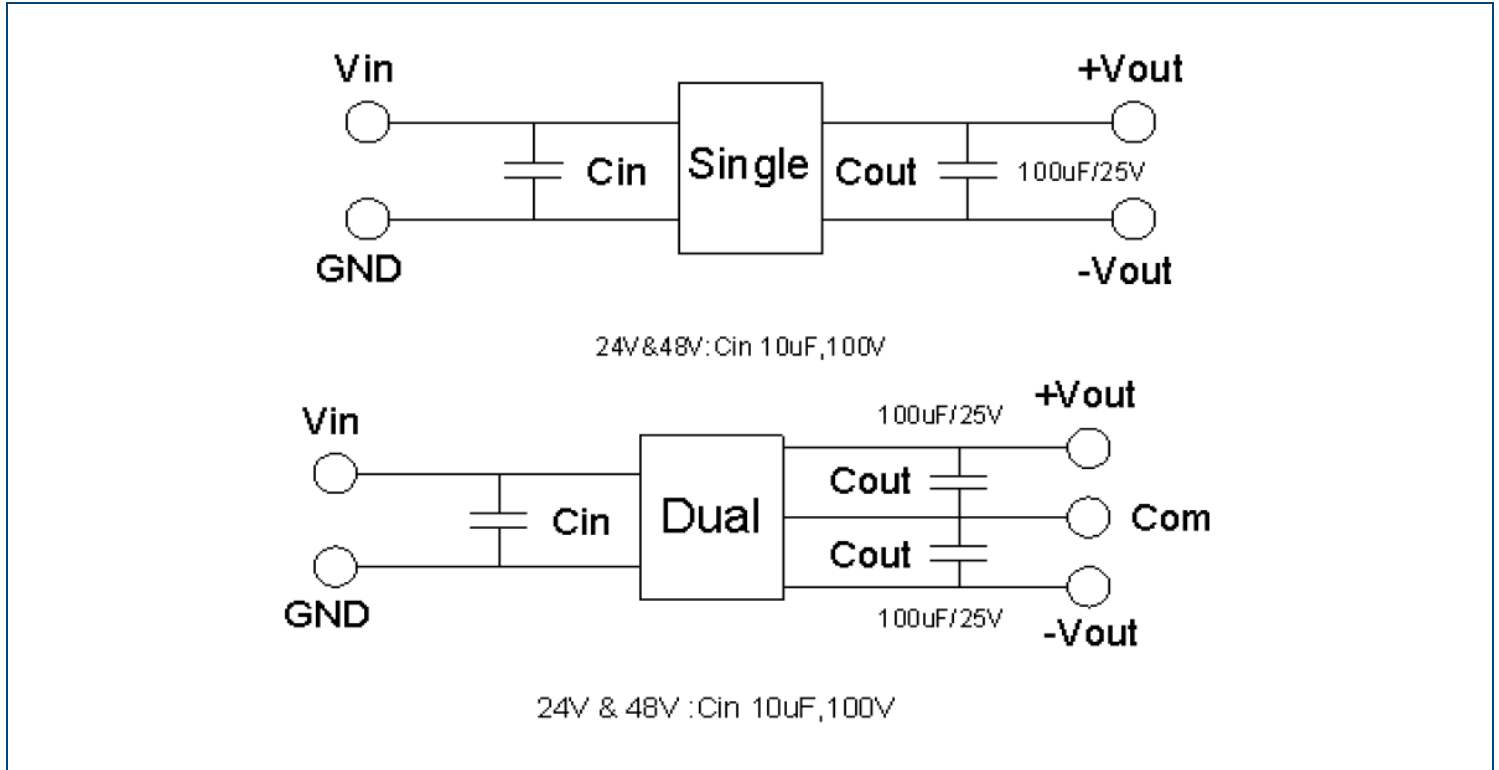
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
<b>INPUT SPECIFICATIONS</b>					
Input Voltage Range	24V Nominal	9	24	36	VDC
	48V Nominal	18	48	75	
Input Current		See Table			
Input Filter		Pi Network			
<b>OUTPUT SPECIFICATIONS</b>					
Output Voltage		See Table			
Voltage Tolerance	Full Load @Vin. (Nom)			±2	%
Line Regulation				±0.5	%
Load Regulation	Single			±0.5	%
	Dual (Balanced Load)			±0.5	
Output Power		See Table			
Output Current		See Table			
Ripple & Noise (20MHz bandwidth)	3-15V Models, BW=DC to 20MHz			100	mVp-p
	>15V Models, BW=DC to 20MHz			1% Vout	
Transient Response Setting Time	25% Load Step Change			350	us
Cross Regulation	Dual (25% to 100% Load)			±5	%
<b>PROTECTION</b>					
Short Circuit Protection	Hiccup	Automatic Recovery			
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temperature	With Derating	-40		100	°C
Storage Temperature		-55		125	°C
Humidity	Non-Condensing			95	%
Cooling		Free Air Convection			
MTBF	MIL-HDBK-217F @25°C	900,000			Hours
<b>GENERAL SPECIFICATIONS</b>					
Efficiency		See Table			
Switching Frequency			300		KHz
Isolation Voltage			5000		VAC
Isolation Resistance	500VDC	1000			MΩ
<b>PHYSICAL SPECIFICATIONS</b>					
Weight		0.55oz (15.5g)			
Dimensions (L x W x H)		1.24in x 0.79in x 0.39in (31.6mm x 20.1mm x 10mm)			
Case Material		Plastic			
<b>SAFETY STANDARDS</b>					
Medical EMC Standard		EMI EN 55011:2009 + A1:2010 EMS EN60601-1-2: 2015			Class A

\*Due to advances in technology, specifications subject to change without notice.

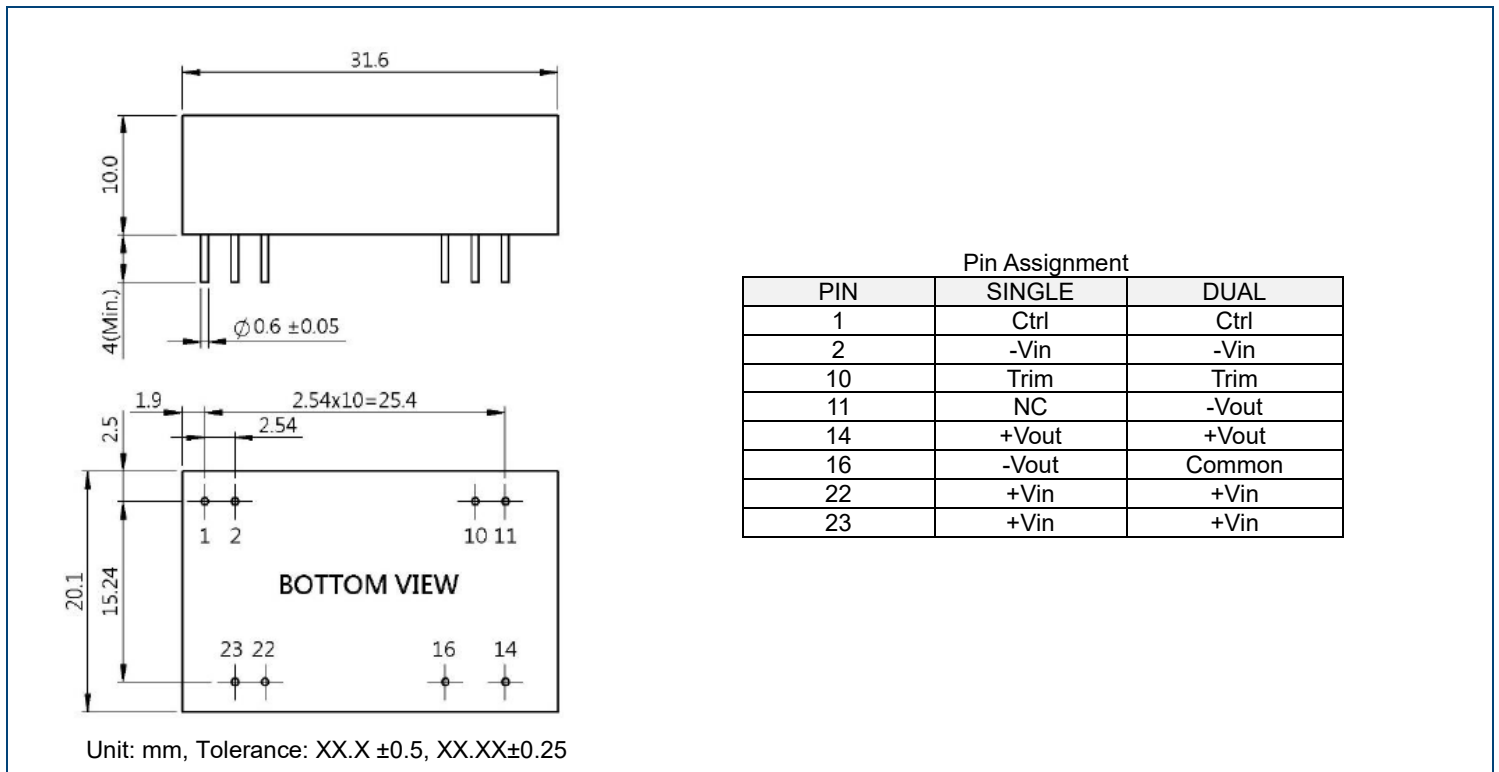
**DERATING CURVES**



RECOMMENDED TEST CIRCUIT



MECHANICAL DRAWINGS



Pin Assignment

PIN	SINGLE	DUAL
1	Ctrl	Ctrl
2	-Vin	-Vin
10	Trim	Trim
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22	+Vin	+Vin
23	+Vin	+Vin

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**COMPANY INFORMATION**

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Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

Contact **Wall Industries** for further information:

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