

Size: 1.27in x 0.43in x 0.60in (32.2mm x 11mm x 15.2mm)

### **FEATURES**

- 4:1 Wide Input Range
- SIP Package
- High Efficiency
- 100% Burned In
- Customized Solutions Available
- Short Circuit Protection
- UL94V-0 Package Material
- RoHS Compliant
- Designed to Meet AAMI/CSA 60601-1, IEC/EN60601-1 3.1 Edition

### **APPLICATIONS**

- Medical
- Industrial
- ITE Applications

#### **DESCRIPTION**

The DCMW10 series of DC/DC converters offers up to 10 watts of output power in a compact 1.27" x 0.43" x 0.60" SIP package. This series consists of single and dual output models with a wide 4:1 input range. Features of this series include high efficiency, short circuit protection, and UL94V-0 package material. This series is RoHS compliant, has been 100% burned-in and is designed to meet AAMI/CSA 60601-1, IEC/EN60601-1 3.1 edition. Please contact factory for order details.

MODEL SELECTION TABLE									
Single Output Models									
Model Number	Input Voltage Range	Output Voltage	Output Current	Input Current		Efficiency	Output Power		
				No Load	Max. Load	Liliciency	Output Fower		
DCMW10-24S03	24VDC (9~36VDC)	3.3VDC	2500mA	50mA	503mA	80%			
DCMW10-24S05		5VDC	2000mA	50mA	508mA	82%	10W		
DCMW10-24S12		12VDC	833mA	30mA	502mA	83%	IUVV		
DCMW10-24S15		15VDC	670mA	30mA	505mA	83%			
DCMW10-48S03	48VDC (18~75)	3.3VDC	2500mA	30mA	252mA	80%			
DCMW10-48S05		5VDC	2000mA	30mA	254mA	82%	10W		
DCMW10-48S12		12VDC	833mA	20mA	251mA	83%	IUVV		
DCMW10-48S15		15VDC	670mA	20mA	252mA	83%			

MODEL SELECTION TABLE								
Dual Output Models								
Model Number	Input Voltage Range	Output Voltage	Output Current	Input Current		Efficiency	Output Power	
				No Load	Max. Load	Lilloleticy	Output Fower	
DCMW10-24D05	24VDC (9~36VDC)	±5VDC	±1000mA	30mA	502mA	83%		
DCMW10-24D12		±12VDC	±420mA	30mA	506mA	83%	10W	
DCMW10-24D15		±15VDC	±340mA	30mA	512mA	83%		
DCMW10-48D05	40) (D.O.	±5VDC	±1000mA	20mA	251mA	83%		
DCMW10-48D12	48VDC (18~75)	±12VDC	±420mA	20mA	253mA	83%	10W	
DCMW10-48D15		±15VDC	±340mA	20mA	256mA	83%		

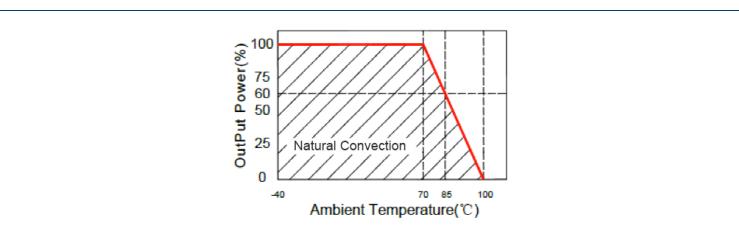


SPECIFICATIONS										
All specification		nput Voltage, and Rated Output Currer specifications based on technological a		rwise noted	L					
SPECIFICATION	TEST	TEST CONDITIONS				Unit				
INPUT SPECIFICATIONS			Min	Тур	Max					
	24VDC Nominal Input	9	24	36	1/00					
Input Voltage Range	48VDC Nominal Input	18	48	75	VDC					
Input Filter	·			Pi Ne	twork					
OUTPUT SPECIFICATIONS	<u>'</u>									
Output Voltage				See <sup>-</sup>	Гable					
Voltage Tolerance	Full Load @Vin(nom.)				±2	%				
Line Regulation						%				
Load Regulation	Single Outputs			±0.5	%					
Load Negulation	Dual (Balanced Load)			±0.5						
Cross Regulation	Dual (25% to 100% Load)				±5	%				
Output Power			See Table							
Output Current			See Table							
Dinale 9 Naine	DM-DC to 200411-	3-15VDC Output Models			100	mVp-p				
Ripple & Noise	BW=DC to 20MHz	>15VDC Output Models			1	% of Vout				
Transient Response Setting Time	25% Load Step Change				350	us				
PROTECTION	<u> </u>									
Short Circuit Protection			Hic	cup, Autom	atic Recov	ery				
<b>ENVIRONMENTAL SPECIFICATION</b>	NS									
Operating Temperature	With derating		-40		100	°C				
Storage Temperature	-		-55		125	°C				
Humidity	Non-Condensing	Non-Condensing			95	%				
Cooling					Free Air Convection 700.000 Hours					
MTBF	MIL-HDBK-217F@25°C	MIL-HDBK-217F@25°C				Hours				
GENERAL SPECIFICATIONS										
Efficiency			See Table							
Switching Frequency			270	300	330	KHz				
Isolation Voltage				3000		VAC				
Isolation Resistance	500VDC		1000			MΩ				
PHYSICAL SPECIFICATIONS										
Weight						0.48oz (13.5g)				
Dimensions (L x W x H)		1.27in x 0.43in x 0.60in (32.2mm x 11mm x 15.2mm)								
Case Material				Plastic						
SAFETY CHARACTERISTICS			<u> </u>							
AAMI/CSA 606										
Safety Approvals		IEC/EN60601-1 3.1 Edition								

# **NOTES**

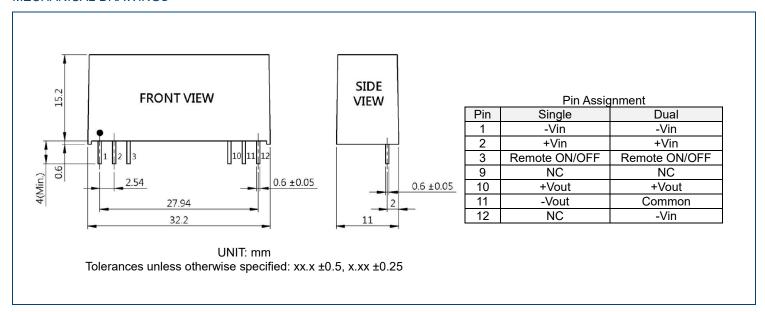
\*Due to advances in technology, specifications subject to change without notice.

## **DERATING CURVES -**

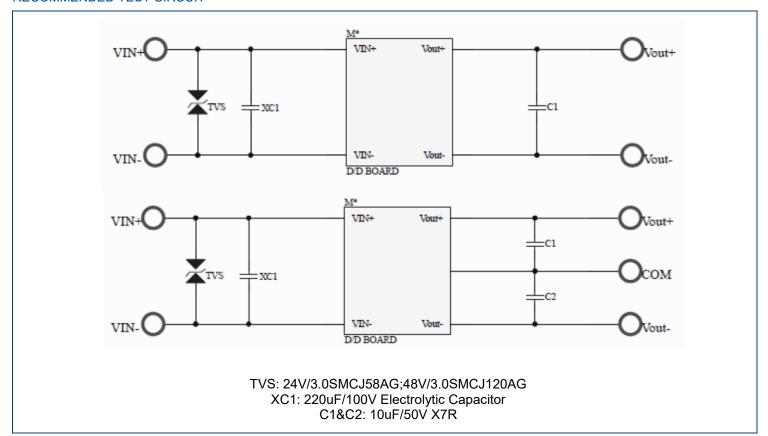




### MECHANICAL DRAWINGS



### RECOMMENDED TEST CIRCUIT





#### COMPANY INFORMATION -

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:

Phone: ☎(603)778-2300 Toll Free: ☎(888)597-9255 Fax: ☎(603)778-9797

E-mail: sales@wallindustries.com
Web: www.wallindustries.com
Address: 37 Industrial Drive
Exeter, NH 03833

©2019 Wall Industries, Inc. Specifications subject to change without notice. Wall Industries is not responsible for typographical errors. The information contained herein is for informational purposes only. This information is provided by Wall Industries and we make no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information contained in this document for any purpose. All product and manufacturer names are trademarks or registered trademarks of their respective companies.