

C30DW-10WM SERIES DC-DC Converter

3KVac Isolated 4:1 Input Voltage Range 10Watt



FEATURES :

- 10 Watt SIP Package
- 4:1 Wide Input Voltage
- 100% Burned In
- High Efficiency To 83%
- Customized Solutions Available
- UL94V-0 Package Material
- Operating Temperature:-40°C TO +82°C
- 3 Years Warranty
- Medical EMC Standard of EMI EN 55011:2009 + A1:2010 (CLASS A) Approved.
- Medical EMC Standard of EMS EN 60601-1-2:2015 Approved.
- Medical/Industry/ITE Application
- I/O Isolation 3000VACrms with Reinforced Insulation , Rated For 250VAC Working Voltage



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	Capacitor load
	Vdc	No Load	Full Load	Vdc	Full Load (mA)	%TYP	uF MAX
C30DW-24S03R10WM	9-36	7	430	3.3	2500	80	4700
C30DW-24S05R10WM	9-36	7	508	5	2000	82	2500
C30DW-24S12R10WM	9-36	7	502	12	833	83	430
C30DW-24S15R10WM	9-36	7	505	15	670	83	270
C30DW-24D05R10WM	9-36	7	502	±5	±1000	83	±1250
C30DW-24D12R10WM	9-36	7	506	±12	±420	83	±220
C30DW-24D15R10WM	9-36	7	512	±15	±340	83	±135
C30DW-48S03R10WM	18-75	4	215	3.3	2500	80	4700
C30DW-48S05R10WM	18-75	4	254	5	2000	82	2500
C30DW-48S12R10WM	18-75	4	251	12	833	83	430
C30DW-48S15R10WM	18-75	4	252	15	670	83	270
C30DW-48D05R10WM	18-75	4	251	±5	±1000	83	±1250
C30DW-48D12R10WM	18-75	4	253	±12	±420	83	±220
C30DW-48D15R10WM	18-75	4	256	±15	±340	83	±135



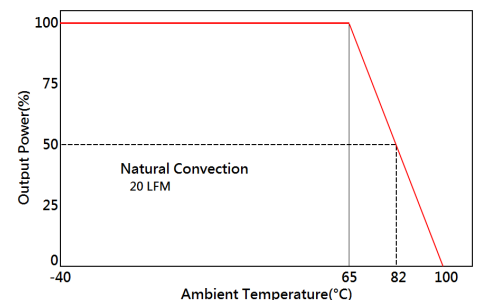
Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				4:1	%
Filter			PI Network		
Protection	Fuse Recommended				
Start up Time	Constant resistive load		15		ms
Remote ON/OFF	DC-DC ON (Referred to -Vin pin)	0	Open	1.2	Vdc
	DC-DC OFF	2.2		12	Vdc

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	%
	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
	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



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General Specifications

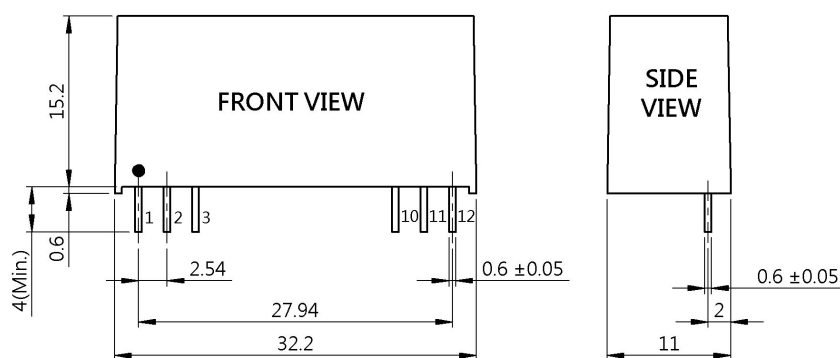
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage	I/P to O/P Reinforced insulation for 250VAC working voltage			3000	Vac
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency			300		KHz
Operating Temperature	Refer to temperature derating graph (with derating)	-40		82	°C
Storage Temperature		-55		125	°C
Case Temperature				+95	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	Plastic				
MTBF	MIL-HDBK-217F@25°C	700000			Hours
Weight			13.5		g
Dimensions			32.2x15.2x11.0		mm

Part Number

C30DW - 24 S 03 R 10W M
A B C D E F G

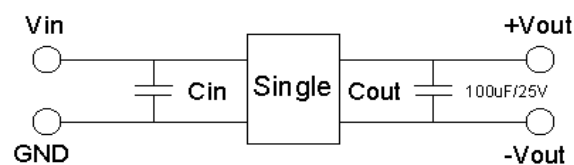
A: Series
B: Input Voltage
C: Single Output(D),Dual(D)
D: Output Voltage
E: Regulated (R)
F: Power Rating
G: Medical Application

Dimensions

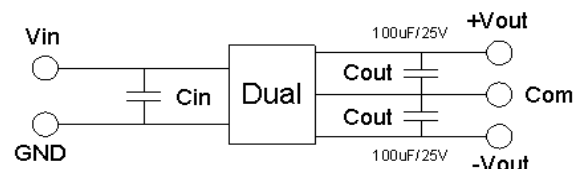


UNIT : mm
tolerance unless otherwise specified : XX.X ±0.5, X.XX ±0.25

Recommended Test Circuit



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



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PIN Assignment

Pin	1	2	3	10	11	12
Single	-Vin	+Vin	Remote ON/OFF	+Vout	-Vout	NC
Dual	-Vin	+Vin	Remote ON/OFF	+Vout	Common	-Vin