

Wide Input Voltage Range 10 Watt Dc-Dc Converter



FEATURES:

- 10W DIL PACKAGE
- 4:1 WIDE INPUT RANGE
- 100% BURNED IN
- HIGH EFFICIENCY
- UL 94V-0 PACKAGE MATERIAL
- CUSTOM SOLUTIONS AVAILABLE
- RoHS COMPLIANT
- 3 YEARS WARRANTY



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

Part Number	Input Voltage Vdc	Output Voltage Vdc	Output Current mA	Input current		Efficiency %TYP
				NO LOAD mA	FULL LOAD mA	
68DW10-12S03RNL	9-36	3.3	3000	60	1006	82
68DW10-12S05RNL	9-36	5	2000	60	1016	82
68DW10-12S12RNL	9-36	12	833	60	1004	83
68DW10-12S15RNL	9-36	15	670	60	1009	83
68DW10-12D05RNL	9-36	±5	±1000	60	1004	83
68DW10-12D12RNL	9-36	±12	±420	60	1012	83
68DW10-12D15RNL	9-36	±15	±340	60	1024	83
68DW10-24S03RNL	18-75	3.3	3000	50	503	82
68DW10-24S05RNL	18-75	5	2000	50	502	82
68DW10-24S12RNL	18-75	12	833	50	502	83
68DW10-24S15RNL	18-75	15	670	50	504	83
68DW10-24D05RNL	18-75	±5	±1000	50	502	83
68DW10-24D12RNL	18-75	±12	±420	50	506	83
68DW10-24D15RNL	18-75	±15	±340	50	512	83

Output Specifications

Voltage Setpoint Accuracy	Single/Dual	±2% max
Temperature Coefficient		±0.05%/°C
Ripple & Noise (20MHZ BW (1))		100mVp-p max
Line Regulation (2)		±1% max
Load Regulation (3)		±0.5% max
Minimum Load		10% of Full Load
Short Circuit Protection		Continuous
Short Circuit Restart		Automatic
Over Load Protection		150% Typ.
Transient Response (4)		350uS max

ALL SPECIFICATIONS TYPICAL AT NOMINAL LINE, FULL LOAD, AND 25°C UNLESS OTHERWISE NOTED.

(1) Measured with 1uF ceramic capacitor connect to the output pins.

(2) High Line to Low Line.

(3) Load Regulation is for output load current change from 25% to 100%

(4) Load Regulation is for output load current change from 25% to 100%

Input Specifications

Input Voltage Range	4:1 Input Range
Input Filter	Pi Network
Protection	Fuse Recommended

General Specifications

Efficiency	80%min
Isolation Voltage (1) *	1500VDC
Isolation Resistance	10 ⁹ Ω min
Switching Frequency	400KHZ TYP.
MTBF (2) *	>900000 Hours
Weight	17.5g Typ.
Case Material	Five-Side Shielded Case
Case Size	31.8mm*20.3mm*12.2mm
Potting Material	Epoxy (UL94-V0)
Conducted Emissions	EN55022 Class A
Radiated Emissions	EN55022 Class A

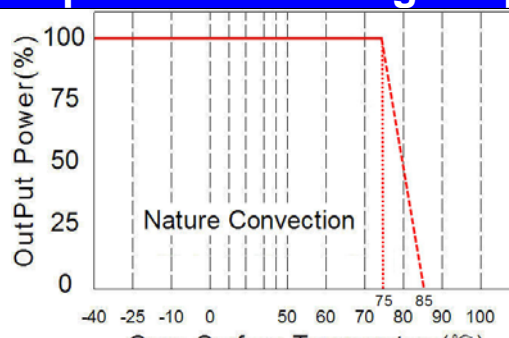
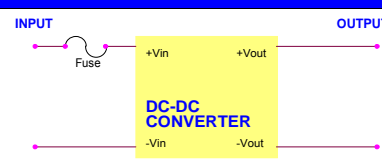
ENVIRONMENTAL

Operating Temperature	-40°C to +75°C
Storage Temperature	-55°C to +125°C
Case Temperature	+95°C max
Humidity	95% max
Cooling	Free-Air Convection

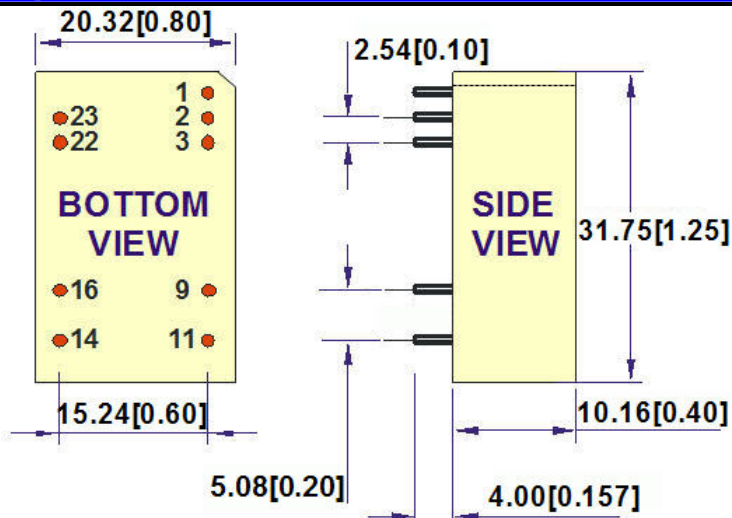
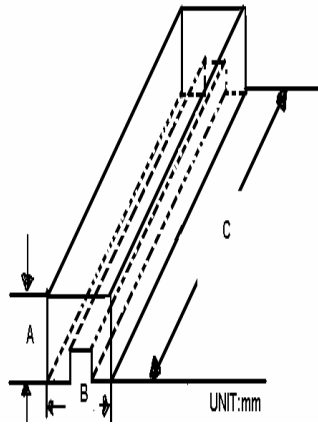
(1) * 1500VDC for 10 seconds.

(2) * MIL-HDBK-217F @25°C, Ground Benign.

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Temperature Derating Graph	Input Fuse Selection Guide						
	 <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <tr> <td style="width: 50%;">INPUT VOLTAGE(VDC)</td> <td style="width: 50%;">INPUT VOLTAGE(VDC)</td> </tr> <tr> <td style="text-align: center;">9-36V</td> <td style="text-align: center;">18-75V</td> </tr> <tr> <td style="text-align: center;">1500mA Slow-Blow Type</td> <td style="text-align: center;">1000mA Slow-Blow Type</td> </tr> </table> <p style="font-size: small; text-align: center;">Note: Certain applications may require the installation of external fuse in front of the input.</p>	INPUT VOLTAGE(VDC)	INPUT VOLTAGE(VDC)	9-36V	18-75V	1500mA Slow-Blow Type	1000mA Slow-Blow Type
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9-36V	18-75V						
1500mA Slow-Blow Type	1000mA Slow-Blow Type						

EXTERNAL CAPACITANCE REQUIREMENTS	Part Number
<p>To meet the reflected ripple requirements of the converter, an input impedance of less than 0.5 ohm from DC to 100KHz is required.</p> <p>External output capacitance is not required for operation, however it is recommended that 10uF tantalum and 0.1uF ceramic capacitance be selected for reduced system noise.</p> <p>Additional output capacitance may be added for increased filtering, but should not exceed 1000uF.</p> <p>We Can Offer EMC-Filter According To EN55011/22 Class B.</p>	<p>68DW10 - 12 S 03 R NL</p> <p style="font-size: x-small;">A B C D E F</p> <p>A:Series B:Input Voltage C:Single(S)Dual(D) D:Output Voltage E:Regulated(R) F:RoHS Version</p>

Markings and dimensions	Packaging									
 <p style="color: red; font-weight: bold; text-align: center;">All dimensions are in mm[inchs]</p> <p style="font-size: x-small; text-align: center;">Unless otherwise specified, all tolerances are ±0.25[0.01]</p>	 <table border="1" style="margin: 10px auto; border-collapse: collapse; font-size: x-small;"> <tr> <th colspan="3">SIZE(mm)</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <td style="text-align: center;">18.71</td> <td style="text-align: center;">23.00</td> <td style="text-align: center;">52.2</td> </tr> </table>	SIZE(mm)			A	B	C	18.71	23.00	52.2
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PIN Connection							
PIN	1	2&3	9	11	14	16	22&23
SINGLE	Remote On/Off	-Vin	NC	NC	+Vout	-Vout	+Vin
DUAL	Remote On/Off	-Vin	Common	-Vout	+Vout	Common	+Vin

NOTE:Pin Size is Tolerance 0.6Φ ±0.05mm