SW, CW Series

DC/DC

10 to 40 Watts

Single Outputs

- **9-18 Vdc inputs**
  18-32 Vdc inputs
- **Efficiency to 80%**
- **Regulated output**

Specifications

INPUT

Voltage Range	9-18Vdc 18-32 Vdc

OUTPUT

Voltage Tolerance	± 2% (trim adjustable)
Ripple and Noise	7mVRMS to 3 Amps 13 mVRMS >3 Amps
Overvoltage Protection	Available with crowbar add option C
Short Circuit Protection	Power Foldback
Trim Adjustability	±10% (typ)
Temperature Coefficient	0.02% / °C

GENERAL

Regulation:	
Line	0.3% Output to 3 Amps 0.5% Output above 3 Amps
Load	0.3% Output to 3 Amps 0.5% Output above 3 Amps
Efficiency	60-80% (typ)
I/O Isolation	Not galvanically isolated

ENVIRONMENTAL

Operating Temperature	-25°C to +71°C No Derating
Storage Temperature	-25°C to +105°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The SW and CW Series are highly efficient, single output DC/DC converters. Proportional energy transfer techniques enable these encapsulated modular converters to maintain well regulated outputs despite large variations in input voltage. The 2:1 input range makes the SW and CW Series ideal for applications where the input dc power is derived from a battery, a motor generator or other types of poorly regulated power sources.

Due to a high efficiency design these converters operate with no derating over the entire operating range to +71°C.

The output of the SW and CW Series can be trim-adjusted by user added circuitry to fine tune for optimum supply voltage

Applications

The SW and CW Series are designed for battery-powered or portable, space-critical applications, as well as other applications not requiring input-output isolation.

SW, CW Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Case	Model Number	Options
9-18 Vdc	5 Vdc	2000mA	2	SW11-200-12	
9-18 Vdc	5 Vdc	2000mA	1B	CW11-200-12	
18-32 Vdc	5 Vdc	2000mA	3	SW11-200-24	C
18-32 Vdc	5 Vdc	2000mA	1B	CW11-200-24	
9-18 Vdc	5 Vdc	3000mA	4B	SW11-300-12	C
9-18 Vdc	5 Vdc	3000mA	1C	CW11-300-12	C
18-32 Vdc	5 Vdc	3000mA	4B	SW11-300-24	C
18 -32 Vdc	5 Vdc	3000mA	1C	CW11-300-24	C
9-18 Vdc	5 Vdc	4000mA	4B	SW11-400-12	C
9-18 Vdc	5 Vdc	4000mA	1C	CW11-400-12	C
18-32 Vdc	5 Vdc	4000mA	4B	SW11-400-24	C
18 -32 Vdc	5 Vdc	4000mA	1C	CW11-400-24	C
9-18 Vdc	5 Vdc	6500mA	1D	CW11-650-12	C
18-32 Vdc	5 Vdc	6500mA	1D	CW11-650-24	C
9-18 Vdc	5 Vdc	8000mA	1D	CW11-800-12	C
18-32 Vdc	5 Vdc	8000mA	1D	CW11-800-24	C
18-32 Vdc	12 Vdc	2000mA	3	SW12-200-24	
18-32 Vdc	12 Vdc	2000mA	1C	CW12-200-24	
18-32 Vdc	12 Vdc	3500mA	4D	SW12-350-24	
18-32 Vdc	12 Vdc	3500mA	1D	CW12-350-24	
18-32 Vdc	15 Vdc	2000mA	3	SW13-200-24	
18-32 Vdc	15 Vdc	2000mA	1C	CW13-200-24	

Dimensions and Connections

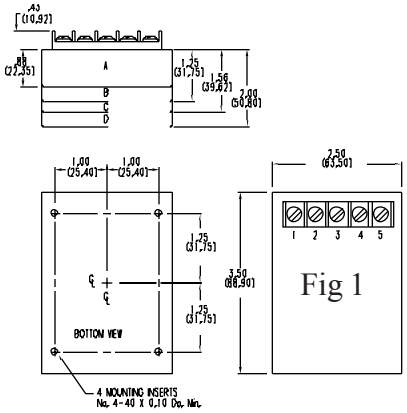

Fig 1

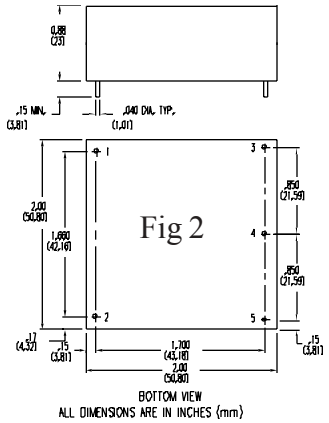

Fig 2

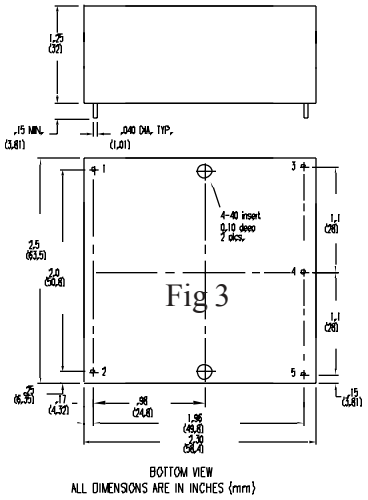

Fig 3

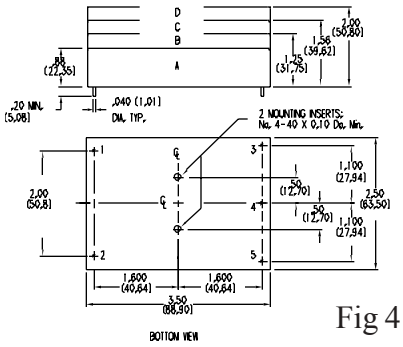

Fig 4

PIN CONNECTIONS
Single Output

1. +Input
2. -Input
3. +Output
4. Trim
5. Common

NOTES:
1. Ripple measured with a 3.3 mf tantalum capacitor across each output.
2. Load regulation from full load to minimum load (25%).
3. External Output Trimming: Output may be externally trimmed ±5%.

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