

Series SW-Single and Dual Output AC-DC Switching Power Supplies

Hi Reliability Industrial Grade
Input Voltage (90-130VAC, 47-440Hz),
Isolated 1200 VRMS
Fully Regulated -- Up to 15 Watts Short Circuit Protected
Terminal Strip Available

Typical Characteristics

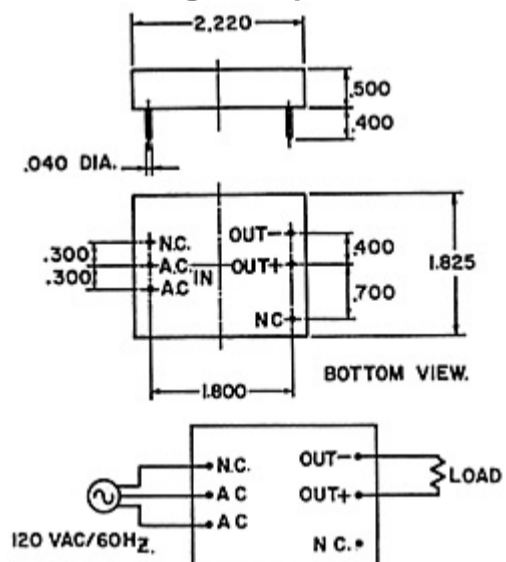
Test Conditions: 25° C ambient
Input Voltage: 90-130 VAC
Input Frequency: 47-440 Hz
Converter Frequency: 200-800 KHz
Operating Temperature: -20° C to +70° C ambient
Output Voltage Temperature Coefficient: 0.02% ° C
Storage Temperature: -55° C. to +105° C
Isolation: 1200 VRMS

Features

- Excellent line regulation $\pm 1\%$ (90-130 VAC)
- Excellent load regulation 25% to 100%, $\pm 2\%$
- Continuous short circuit protection
- Encapsulated semiconductors, conservatively rated for maximum reliability
- Isolation: 100 megohms at 1200 VRMS
- Wide Input 90-130 VAC, 47 to 440 Hz

This series of switching AC to DC power supplies are available in 18 different models. All single and dual outputs are isolated and offer excellent line and and load regulation. These units have continuous short circuit protection, require no output capacitors, and will operate from -25° C to +70° C ambient, with no heat sink or electrical derating required. The hi-reliability SW Series, up to 15 watts, is the design choice for your stringent industrial applications.

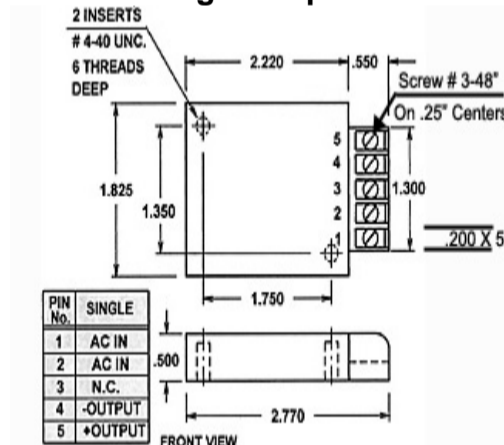
SWA Single Output 5 Watts



Typical Weight: 2.0 oz./56.69 grams

[Larger Size Schematic \[1\]](#)

TSWA Single Output 5 Watts



Typical Weight: 2.4 oz./68.03 grams

Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

[Larger Size Schematic \[2\]](#)

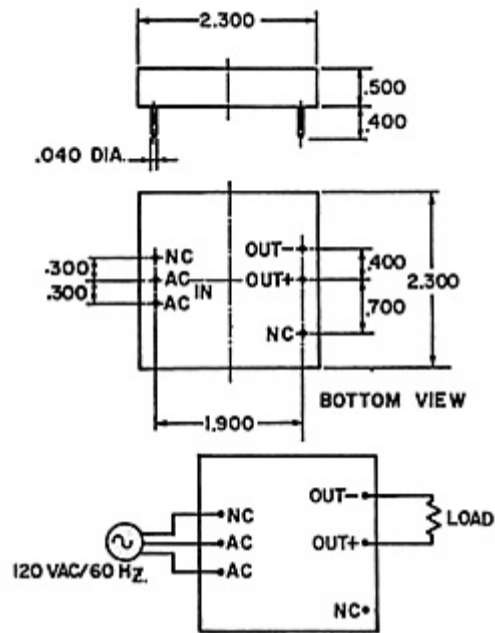
Series SWA-Single Output-5 Watts

Pico Part No.	Output Voltage VDC	Max. Load Current mA	Max. Output Power (watts)	EFF @* Full Load Typical (%)	Output* Voltage Tolerance ($\pm\%$)	Load** Regulation 25%-100% Load ($\pm\%$)*	Line* Regulation @ Full Load ($\pm\%$)	Output* Voltage Ripple (MV p-p)	SW Pkg Price (US \$)	TSW Pkg Price (US \$)
SWA3.3S	TSWA3.3S	3.3	909	3	68	2	1	150	101.30	118.47
SWA5S	TSWA5S	5	1000	5	68	2	1	150	101.30	118.47
SWA5.25S	TSWA5.25S	5.2	961	5	68	2	1	150	101.30	118.47

SWA12S	TSWA12S	12	415	5	68	2	2	1	100	101.30	118.47
SWA15S	TSWA15S	15	330	5	70	2	2	1	100	101.30	118.47
SWA24S	TSWA24S	24	208	5	70	2	2	1	200	101.30	118.47
SWA28S	TSWA28S	28	178	5	70	2	2	1	200	101.30	118.47
SWA48S	TSWA48S	48	104	5	70	2	2	1	200	101.30	118.47

* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

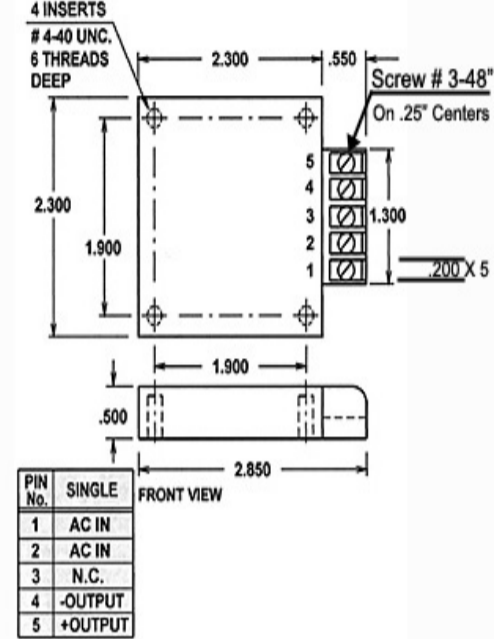
SWB-SWC Single Output 10 Watts



Typical Weight: 2.7 oz./76.54 grams

[Larger Size Schematic \[3\]](#)

TSWB Single Output 10 Watts

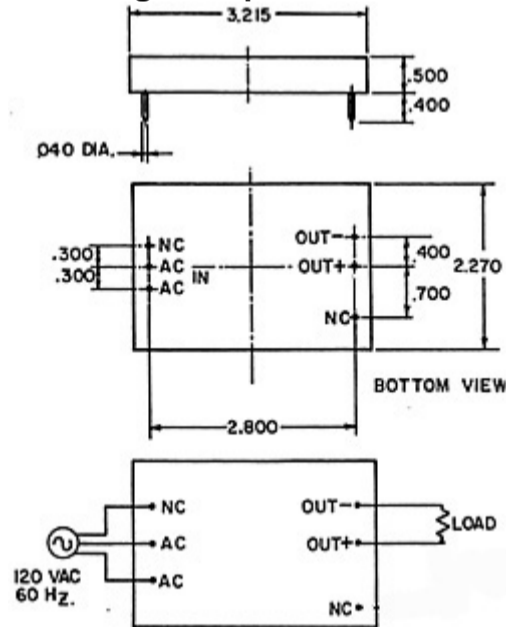


Typical Weight: 3.1 oz./87.88 grams

Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

[Larger Size Schematic \[4\]](#)

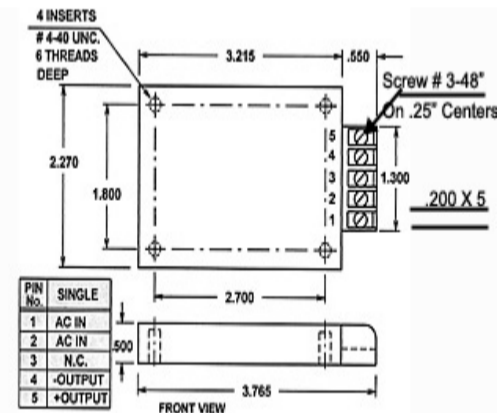
Single Output 15 Watts



Typical Weight: 3.7 oz./104.89 grams

[Larger Size Schematic \[5\]](#)

TSWC Single Output 15 Watts



Typical Weight: 4.1 oz./116.23 grams

Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

[Larger Size Schematic \[6\]](#)

Series SWB-Single Output-10 Watts

Pico Part No.	Output Voltage VDC	Max. Load Current mA	Max. Output Power (watts)	EFF @* Full Load Typical (%)	Output* Voltage Tolerance (±%)	Load** Regulation 25%-100% Load (±%)*	Line* Regulation @ Full Load (±%)	Output* Voltage Ripple (MV p-p)	SW Pkg. Price (US \$)	TSW Pkg. Price (US \$)
SWB3.3S	TSWB3.3S	3.3	1515	5	67	2	1	150	114.12	131.30
SWB5S	TSWB5S	5	1600	8	67	2	1	150	114.12	131.30
SWB5.25S	TSWB5.25S	5.2	1538	8	67	2	1	150	114.12	131.30

SWB12S	TSWB12S	12	830	10	73	2	2	1	100	114.12	131.30
SWB15S	TSWB15S	15	660	10	75	2	2	1	100	114.12	131.30
SWB24S	TSWB24S	24	416	10	73	2	2	1	200	114.12	131.30
SWB28S	TSWB28S	28	356	10	73	2	2	1	200	114.12	131.30
SWB48S	TSWB48S	48	208	10	73	2	2	1	300	114.12	131.30

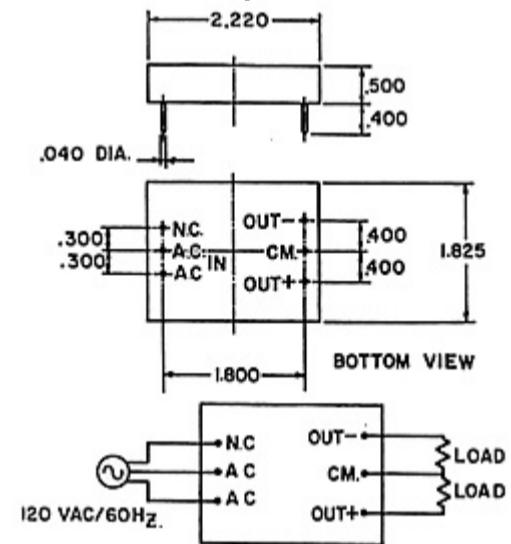
* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

Series SWC-Single Output-15 Watts

Pico Part No.	Output Voltage VDC	Max. Load Current mA	Max. Output Power (watts)	EFF @* Full Load Typical (%)	Output* Voltage Tolerance (±%)	Load** Regulation 25%-100% Load (±%)*	Line* Regulation @ Full Load (±%)	Output* Voltage Ripple (MV p-p)	SW Pkg. Price (US \$)	TSW Pkg. Price (US \$)
SWC3.3S	TSWC3.3S	3.3	1818	6	67	2	1	150	126.95	144.12
SWC5S	TSWC5S	5	2000	10	67	2	1	150	126.95	144.12
SWC5.25S	TSWC5.25S	5	1923	10	67	2	1	150	126.95	144.12
SWC12S	TSWC12S	12	1250	15	73	2	1	100	126.95	144.12
SWC15S	TSWC15S	15	1000	15	74	2	1	100	126.95	144.12
SWC24S	TSWC24S	24	624	15	74	2	1	300	126.95	144.12
SWC28	TSWC28S	28	534	15	74	2	1	300	126.95	144.12
SWC48S	TSWC48S	48	312	15	73	2	1	350	126.95	144.12

* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

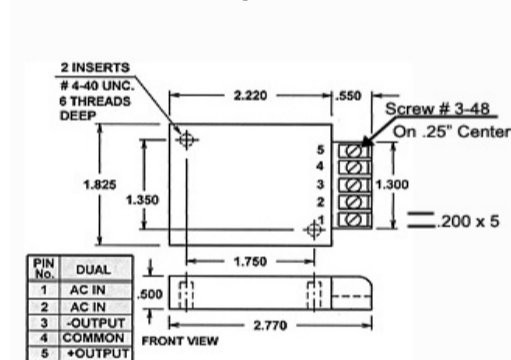
SWA-Dual Output Dual Output 5 Watts



Typical Weight: 2.0 oz./56.69 grams

[Larger Size Schematic \[7\]](#)

TSWA-Dual Output Dual Output 5 Watts



Typical Weight: 2.4 oz./68.03 grams

Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

[Larger Size Schematic \[8\]](#)

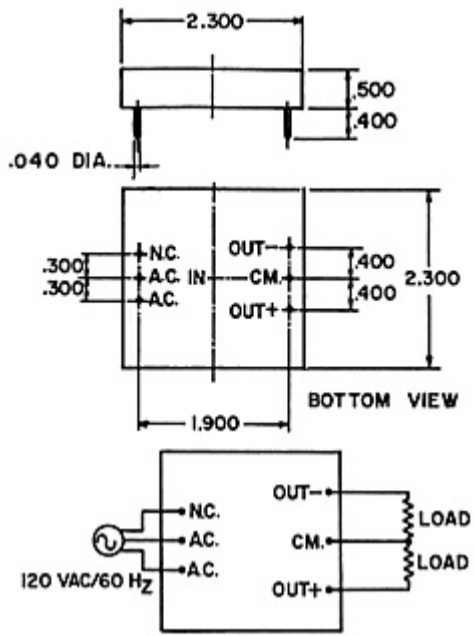
Series SWA-Dual Output-5 Watts

Pico Part No.	Output Voltage VDC	Max. Load Current mA per Output	Max. Output Power (watts) per Output	EFF @* Full Load Typical (%)	Output* Voltage Tolerance (±%)	Load** Regulation 25%-100% Load (±%)*	Line* Regulation @ Full Load (±%)	Output* Voltage Ripple (MV p-p)	SW Pkg. Price (US \$)	TSW Pkg. Price (US \$)
SWA5D	TSWA5D	± 5	500	2.5	68	2	1	150	117.97	135.14
SWA12D	TSWA12D	± 12	200	2.5	68	2	1	100	117.97	135.14
SWA15D	TSWA15D	± 15	165	2.5	70	2	1	100	117.97	135.14

* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

SWB-SWC Dual Outputs

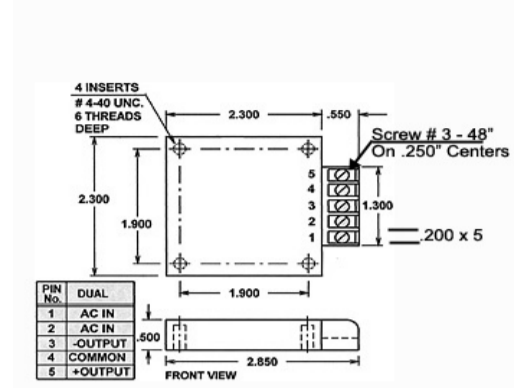
Dual Output 10 Watts



Typical Weight: 2.7 oz./76.54 grams

[Larger Size Schematic \[9\]](#)

TSWB-Dual Output Dual Output 10 Watts

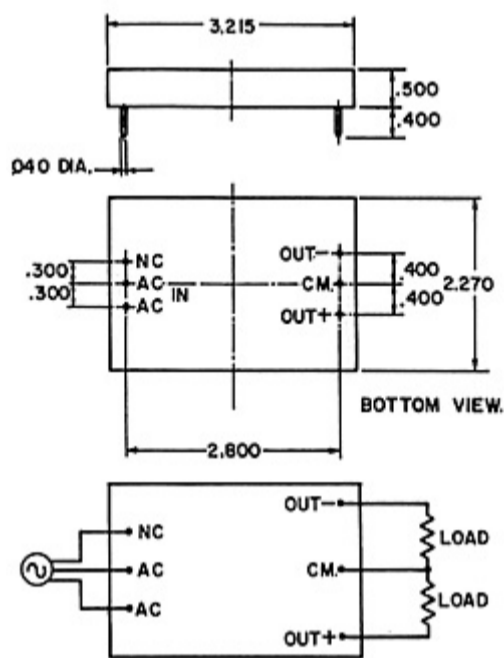


Typical Weight: 3.1 oz./87.88 grams

Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

[Larger Size Schematic \[10\]](#)

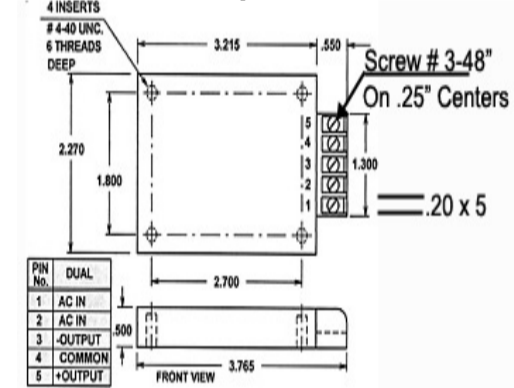
Dual Output 15 Watts



Typical Weight: 3.7 oz./104.89 grams

[Larger Size Schematic \[11\]](#)

TSWC-Dual Output Dual Output 15 Watts



Typical Weight: 4.3 oz./121.90 grams

Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

[Larger Size Schematic \[12\]](#)

Series SWB-Dual Output-10 Watts

Pico Part No.	Output Voltage VDC	Max. Load Current mA per Output	Max. Output Power (watts) per Output	EFF @* Full Load Typical (%)	Output* Voltage Tolerance (±%)	Load** Regulation 25%-100% Load (±%)*	Line* Regulation @ Full Load (±%)	Output* Voltage Ripple (MV p-p)	SW Pkg. Price (US \$)	TSW Pkg. Price (US \$)	
SWB5D	TSWB5D	± 5	800	4	68	2	2	1	150	130.79	147.97
SWB12D	TSWB12D	± 12	415	5	75	2	2	1	100	130.79	147.97
SWB15D	TSWB15D	± 15	335	5	76	2	2	1	100	130.79	147.97

* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

Series SWC-Dual Output-15 Watts

Pico Part No.		Output Voltage VDC	Max. Load Current mA per Output	Max. Output Power (watts) per Output	EFF @* Full Load Typical (%)	Output* Voltage Tolerance ($\pm\%$)	Load** Regulation 25%-100% Load ($\pm\%$)*	Line* Regulation @ Full Load ($\pm\%$)	Output* Voltage Ripple (MV p-p)	SW Pkg. Price (US \$)	TSW Pkg. Price (US \$)
SWC5D	TSWC5D	± 5	1000	5	69	2	2	1	150	143.62	160.79
SWC12D	TSWC12D	± 12	625	7.5	75	2	2	1	100	143.62	160.79
SWC15D	TSWC15D	± 15	500	7.5	76	2	2	1	100	143.62	160.79

* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

For immediate engineering assistance or to place an order:

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