

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

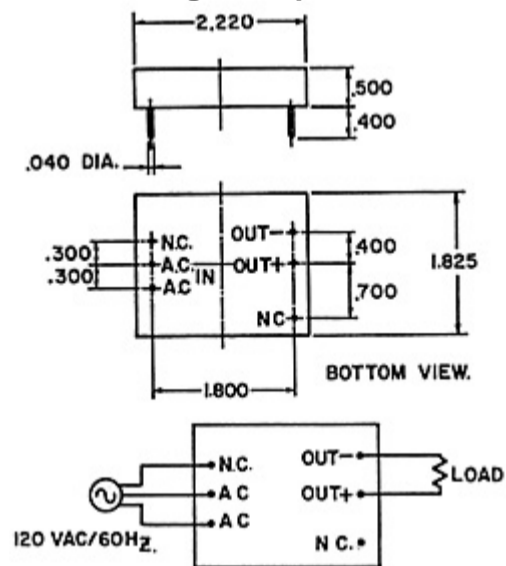
Test Conditions: 25° C ambient
Input Voltage: 90-130 VAC
Input Frequency: 47-440 Hz
Converter Frequency: 200-800 KHz
Operating Temperature: -20° C to +70° C ambient
Output Voltage Temperature Coefficient: 0.02% ° C
Storage Temperature: -55° C. to +105° C
Isolation: 1200 VRMS

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 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.

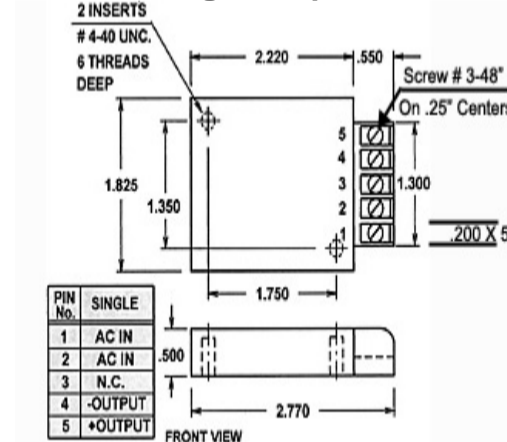
SWA Single Output 5 Watts



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.

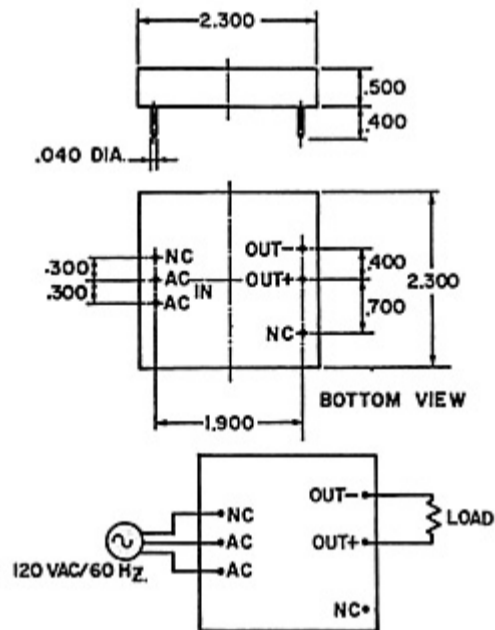
[Larger Size Schematic \[2\]](#)

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 (±%)	Load** Regulation 25%-100% Load (±%)*	Line* Regulation @ Full Load (±%)	Output* Voltage Ripple (MV p-p)	SW Pkg Price (US \$)	TSW Pkg Price (US \$)
SWA3.3S	TSWA3.3S	3.3	909	3	68	2	2	1	150	136.25
SWA5S	TSWA5S	5	1000	5	68	2	2	1	150	136.25
SWA5.25S	TSWA5.25S	5.2	961	5	68	2	2	1	150	136.25
SWA12S	TSWA12S	12	415	5	68	2	2	1	100	136.25
SWA15S	TSWA15S	15	330	5	70	2	2	1	100	136.25
SWA24S	TSWA24S	24	208	5	70	2	2	1	200	136.25
SWA28S	TSWA28S	28	178	5	70	2	2	1	200	136.25
SWA48S	TSWA48S	48	104	5	70	2	2	1	200	136.25

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

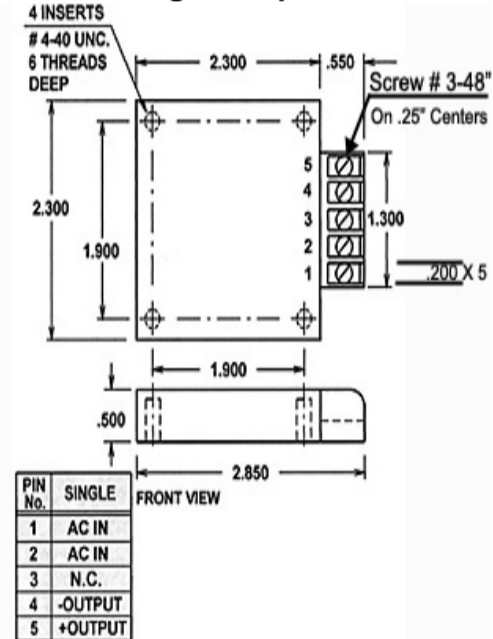
SWB-SWC Single Output 10 Watts



Typical Weight: 2.7 oz./76.54 grams

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

TSWB Single Output 10 Watts

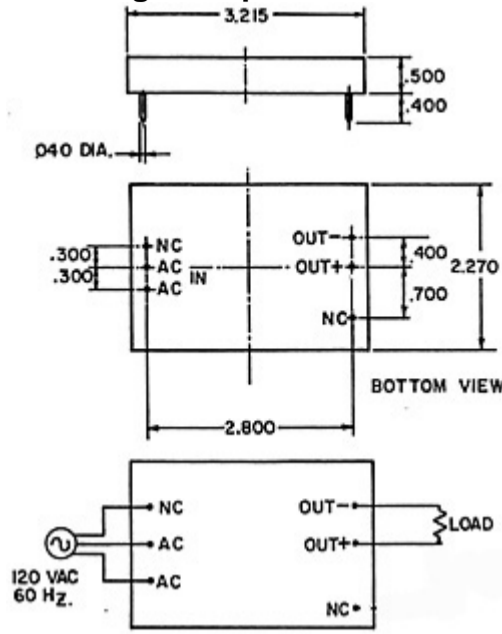


Typical Weight: 3.1 oz./87.88 grams

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

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

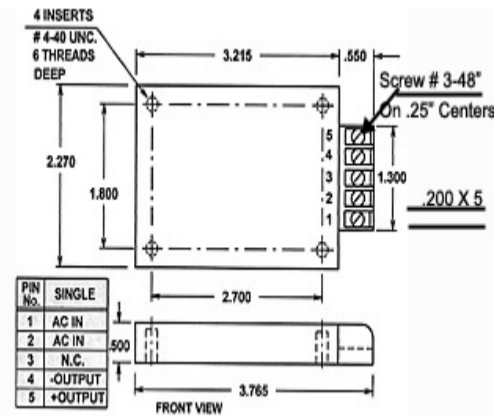
Single Output 15 Watts



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	2	1	150	131.24	150.99
SWB5S TSWB5S	5	1600	8	67	2	2	1	150	131.24	150.99
SWB5.25S TSWB5.25S	5.2	1538	8	67	2	2	1	150	131.24	150.99
SWB12S TSWB12S	12	830	10	73	2	2	1	100	131.24	150.99
SWB15S TSWB15S	15	660	10	75	2	2	1	100	131.24	150.99
SWB24S TSWB24S	24	416	10	73	2	2	1	200	131.24	150.99
SWB28S TSWB28S	28	356	10	73	2	2	1	200	131.24	150.99
SWB48S TSWB48S	48	208	10	73	2	2	1	300	131.24	150.99

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

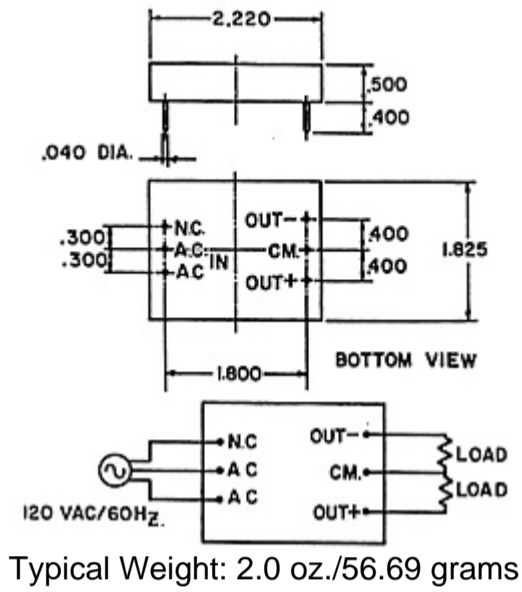
Series SWC-Single Output-15 Watts

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	2	1	150	145.99	165.74
SWC5S TSWC5S	5	2000	10	67	2	2	1	150	145.99	165.74
SWC5.25S TSWC5.25S	5	1923	10	67	2	2	1	150	145.99	165.74
SWC12S TSWC12S	12	1250	15	73	2	2	1	100	145.99	165.74
SWC15S TSWC15S	15	1000	15	74	2	2	1	100	145.99	165.74
SWC24S TSWC24S	24	624	15	74	2	2	1	300	145.99	165.74
SWC28 TSWC28S	28	534	15	74	2	2	1	300	145.99	165.74

SWC48S	TSWC48S	48	312	15	73	2	2	1	350	145.99	165.74
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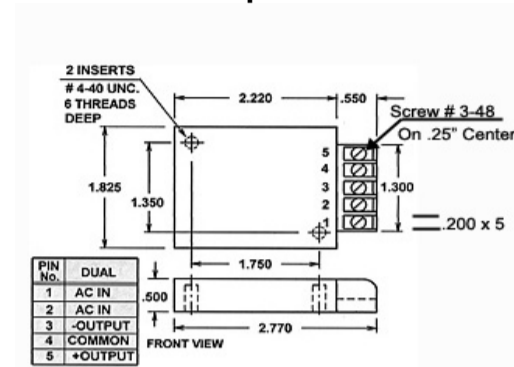
* At full load, Measurements taken at 115VAC @ 60Hz. **10% minimum load required at all times.

**SWA-Dual Output
Dual Output 5 Watts**



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]

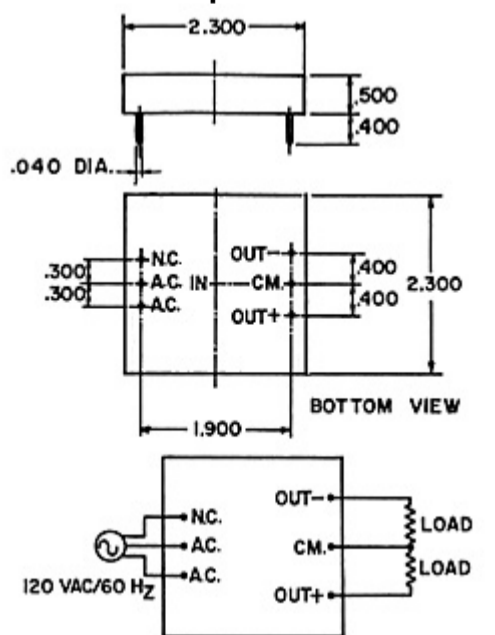
Series SWA-Dual Output-5 Watts

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	2	1	150	135.67	155.42
SWA12D	TSWA12D	± 12	200	2.5	68	2	2	1	100	135.67	155.42
SWA15D	TSWA15D	± 15	165	2.5	70	2	2	1	100	135.67	155.42

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

SWB-SWC Dual Outputs

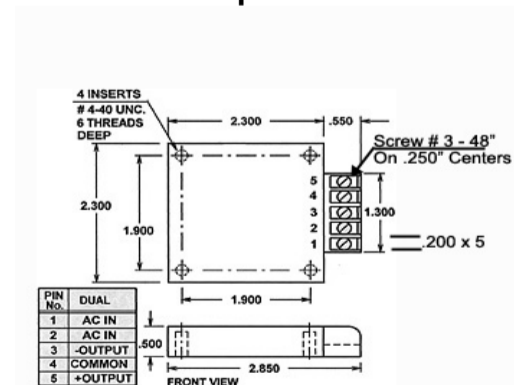
Dual Output 10 Watts



Typical Weight: 2.7 oz./76.54 grams

Larger Size Schematic [9]

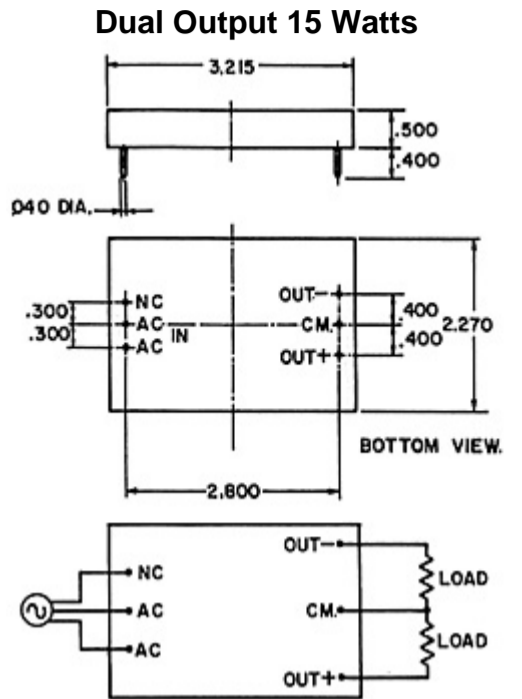
**TSWB-Dual Output
Dual Output 10 Watts**



Typical Weight: 3.1 oz./87.88 grams

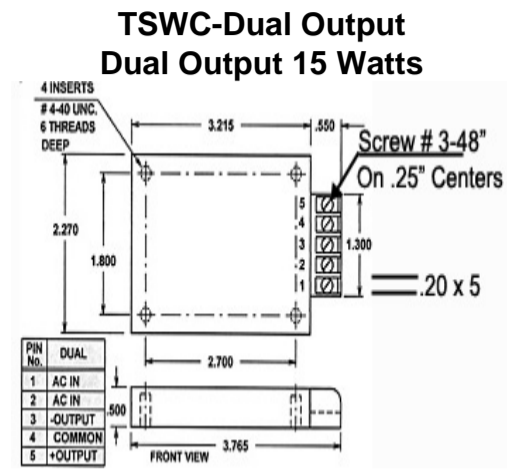
Note: The recommended torque for mounting screws is 3 to 5 In-Lbs.

Larger Size Schematic [10]



Typical Weight: 3.7 oz./104.89 grams

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



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	150.41	170.16
SWB12D	TSWB12D	± 12	415	5	75	2	2	1	100	150.41	170.16
SWB15D	TSWB15D	± 15	335	5	76	2	2	1	100	150.41	170.16

* 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 (±%)	Load** Regulation 25%-100% Load (±%)*	Line* Regulation @ Full Load (±%)	Output* Voltage Ripple (MV p-p)	SW Pkg. Price (US \$)	TSW Pkg. Price (US \$)	
SWC5D	TSWC5D	± 5	1000	5	69	2	2	1	150	165.16	184.91
SWC12D	TSWC12D	± 12	625	7.5	75	2	2	1	100	165.16	184.91
SWC15D	TSWC15D	± 15	500	7.5	76	2	2	1	100	165.16	184.91

* 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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