

**SERIES:** SWI5-N-USB | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

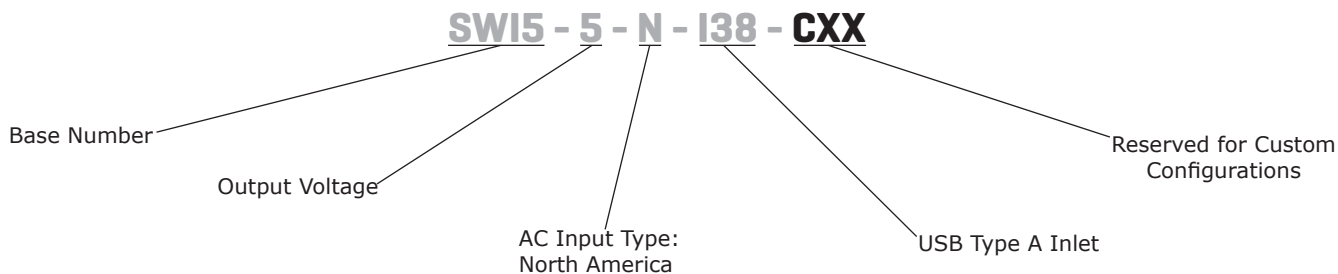
- 5 W power
- DoE Level VI, CoC Tier 2 efficiency
- universal input (90~264 Vac)
- single regulated 5 Vdc output
- over voltage, over current, and short circuit protections
- UL/cUL, PSE safety approvals



| MODEL        | output voltage<br>(Vdc) | output current<br>max<br>(A) | output power<br>max<br>(W) | ripple and noise <sup>1</sup><br>max<br>(mVp-p) | efficiency level <sup>2</sup> |
|--------------|-------------------------|------------------------------|----------------------------|---|-------------------------------|
| SWI5-5-N-I38 | 5                       | 1                            | 5                          | 300   | VI                            |

Notes: 1. At full load, nominal input, 25 °C, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 μF ceramic and 10 μF electrolytic capacitors.  
2. CoC Tier 2 complaint

**PART NUMBER KEY**



## INPUT

| parameter                 | conditions/description                             | min | typ | max            | units  |
|---------------------------|--|-----|-----|----------------|--------|
| voltage                   |  | 90  |     | 264            | Vac    |
| frequency                 |  | 47  |     | 63             | Hz     |
| current                   |  |     |     | 0.2            | A      |
| leakage current           |  |     |     | 0.02           | mA     |
| no load power consumption | at 115/230 Vac, 50/60 Hz<br>Level VI<br>CoC Tier 2 |     |     | 0.075<br>0.075 | W<br>W |

## OUTPUT

| parameter       | conditions/description | min | typ | max | units |
|-----------------|------------------------|-----|-----|-----|-------|
| line regulation |                        |     | ±5  |     | %     |
| load regulation |                        |     | ±5  |     | %     |
| start-up time   |                        |     |     | 3   | s     |

## PROTECTIONS

| parameter                | conditions/description | min | typ | max | units |
|--------------------------|------------------------|-----|-----|-----|-------|
| over voltage protection  |                        |     |     | 10  | Vdc   |
| over current protection  | auto recovery          |     |     | 1.5 | A     |
| short circuit protection |                        |     |     |     |       |

## SAFETY & COMPLIANCE

| parameter         | conditions/description   | min    | typ            | max | units      |
|-------------------|--|--------|----------------|-----|------------|
| isolation voltage | input to output at 10 mA for 1 minute                                  |        | 3,000<br>4,242 |     | Vac<br>Vdc |
| safety approvals  | UL/cUL (62368), LPS, PSE   |        |                |     |            |
| EMI/EMC           | FCC Part 15 Class B  |        |                |     |            |
| MTBF              | as per Telcordia SR-332, Issue 2, at 115/230 Vac,<br>full load, 0~40°C | 50,000 |                |     | hours      |
| RoHS              | 2011/65/EU   |        |                |     |            |

## ENVIRONMENTAL

| parameter             | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature |                        | 0   |     | 40  | °C    |
| storage temperature   |                        | -20 |     | 60  | °C    |
| operating humidity    | non-condensing         | 20  |     | 85  | %     |
| storage humidity      | non-condensing         | 5   |     | 95  | %     |

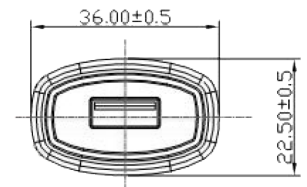
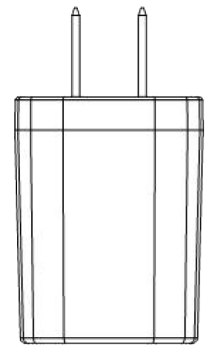
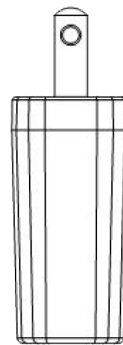
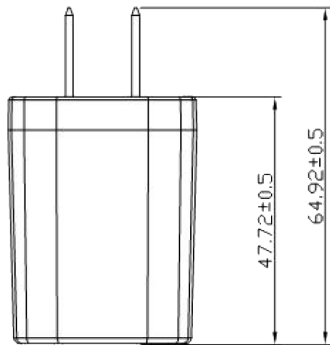
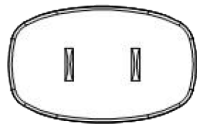
## MECHANICAL

| parameter  | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 64.92 x 36 x 22.5      |     |     |     | mm    |
| input plug | North America, 2-pin   |     |     |     |       |
| weight     |                        |     | 80  |     | g     |

## MECHANICAL DRAWING

units: mm  
tolerance: ±0.5 mm

| PIN | Output Voltage |
|-----|----------------|
| 1   | +5V            |
| 2   | Short          |
| 3   | Short          |
| 4   | GND            |

## REVISION HISTORY

| rev. | description            | date       |
|------|------------------------|------------|
| 1.0  | initial release        | 04/30/2015 |
| 1.01 | updated datasheet      | 09/14/2016 |
| 1.02 | safety approval update | 07/15/2020 |

The revision history provided is for informational purposes only and is believed to be accurate.



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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

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