

date 12/09/2024

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SERIES: SWI10B-N-USB | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

- up to 10 W continuous power
- DoE Level VI efficiency
- universal input voltage range
- ultra-compact case
- no load power consumption < 0.075 W
- over voltage, over current, and short circuit protections
- UL/cUL & FCC safety approvals
- certified to IEC 62368-1
- Class II construction
- black and white case options available

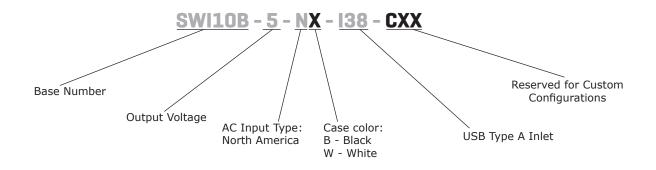




| MODEL | output voltage | output current | output power | ripple and noise¹ | efficiency level |
|-----------------|-------------------|-------------------|-----------------|-----------------------|---------------------|
| | (Vdc) | max (A) | max (W) | max (mVp-p) | |
| SWI10B-5-NX-I38 | 5 | 2 | 10 | 300 | VI |

Notes: 1. At full load, 25°C, at 115/230 Vac input, 20 MHz bandwidth oscilloscope, output terminated with 0.1 µF and 10 µF capacitors.

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|--------------------------------------|-----|---------|-------|-------|
| voltage | | 90 | 100~240 | 264 | Vac |
| frequency | | 47 | 50~60 | 63 | Hz |
| current | at nominal input voltage | | | 0.3 | Α |
| leakage current | at nominal input voltage & frequency | | | 0.25 | mA |
| no load power consumption | at 115/230 Vac | | | 0.075 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|---------------|--------------------------|-----|-----|-----|-------|
| regulation | | | ±5 | | % |
| start-up time | at nominal input voltage | | | 3 | S |
| rise time | at nominal input voltage | | | 100 | ms |
| hold up time | | 5 | | | ms |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|---------------------------------|-----|-----|-----|-------|
| over voltage protection | | | | 10 | Vdc |
| over current protection | output shut down, auto recovery | | | 3.0 | Α |
| short circuit protection | yes | | | | |

SAFETY & COMPLIANCE

| parameter | conditions/description | min | typ | max | units |
|-------------------|--|--------|----------------|-----|------------|
| isolation voltage | input to output at 10 mA for 1 minute | | 3,000 4,242 | | Vac Vdc |
| | certified to 62368-1: IEC | | , | | |
| safety approvals | UL/cUL | | | | |
| EMI/EMC | FCC | | | | |
| MTBF | as per Telcordia SR-332 (Issue 2), at 115/230 Vac, full load, $0^{\circ}C^{\sim}40^{\circ}C$ | 50,000 | | | hours |
| RoHS | yes | | | | |

ENVIRONMENTAL

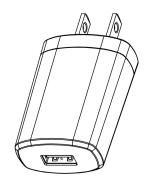
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -20 | | 60 | °C |
| operating humidity | non-condensing | 20 | | 85 | % |
| storage humidity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

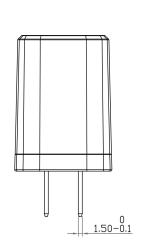
MECHANICAL

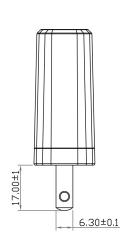
| parameter | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 68.7 x 37 x 23.5 | | | | mm |
| inlet plug | North America, 2-pin | | | | |
| weight | | | 32 | | g |

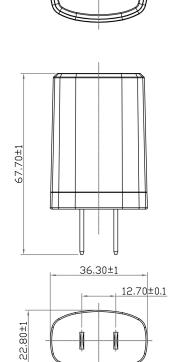
MECHANICAL DRAWING

units: mm









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

REVISION HISTORY

| rev. | description | date |
|------|-------------------|------------|
| 1.0 | initial release | 06/01/2020 |
| 1.01 | datasheet updated | 12/09/2024 |

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



Headquarters 15575 SW Sequoia Pkwy #100 Fax 503.612.2383 Portland, OR 97224 800.275.4899

cui.com techsupport@cui.com

CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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