

SERIES: SWI6-E | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

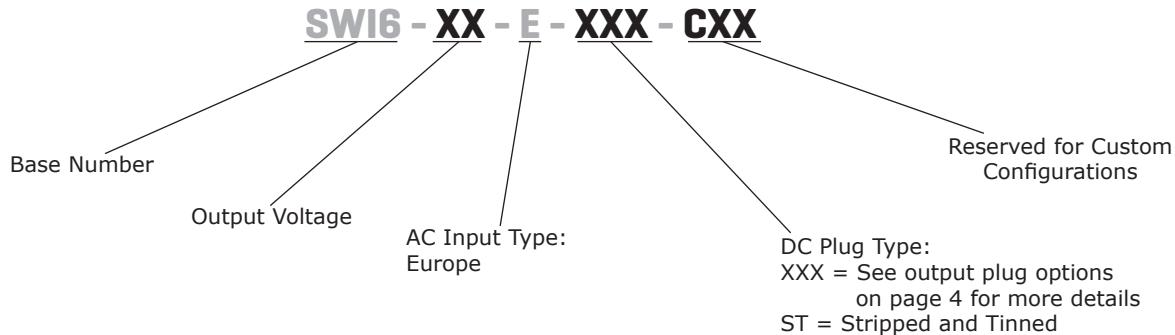
- up to 6 W continuous power
- DOE Level VI, CEC, ErP Stage 2
- no load power consumption < 0.1 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- CE safety approvals
- certified to EN 62368



| MODEL | input voltage | input frequency | output voltage | output current | output power | ripple and noise¹ | efficiency level | no load power consumption | |
|--------------|----------------------|------------------------|-----------------------|-----------------------|---------------------|-------------------------------------|--------------------------------|----------------------------------|----------------|
| | range (Vac) | range (Hz) | nom (Vdc) | max (A) | max (W) | max (mVp-p) | average² (%) | 10% (%) | typ (W) |
| SWI6-3.3-E | 90 ~ 264 | 47 ~ 63 | 3.3 | 1.5 | 4.95 | 100 | 74.0 | 63.3 | 0.03 |
| SWI6-5-E | 90 ~ 264 | 47 ~ 63 | 5.0 | 1.5 | 7.5 | 100 | 77.5 | 66.7 | 0.05 |
| SWI6-5.9-E | 90 ~ 264 | 47 ~ 63 | 5.9 | 1.2 | 7.08 | 100 | 78.7 | 65.0 | 0.05 |
| SWI6-7.5-E | 90 ~ 264 | 47 ~ 63 | 7.5 | 1.0 | 7.5 | 100 | 80.3 | 70.1 | 0.04 |
| SWI6-9-E | 90 ~ 264 | 47 ~ 63 | 9.0 | 0.67 | 6.03 | 100 | 79.9 | 66.6 | 0.04 |
| SWI6-12-E | 90 ~ 264 | 47 ~ 63 | 12.0 | 0.6 | 7.2 | 120 | 80.9 | 65.1 | 0.05 |
| SWI6-15-E | 90 ~ 264 | 47 ~ 63 | 15.0 | 0.5 | 7.5 | 150 | 80.9 | 63.3 | 0.06 |

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 μ F multilayer ceramic and 47 μ F low ESR electrolytic capacitors.
2. Average efficiency is measured at 25%, 50%, 75%, and 100% load.

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|---|-----|---------|------|-------|
| voltage | | 90 | 100~240 | 264 | Vac |
| frequency | | 47 | 50~60 | 63 | Hz |
| current | | | | 0.19 | A |
| inrush current | at 240 Vac, full load, 25°C, cold start | | | 60 | A |
| leakage current | | | | 0.25 | mA |
| no load power consumption | | | | 0.1 | W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|--------------|------------------------|-------|-----|-------|-------|
| regulation | 3.3 Vdc output voltage | 2.97 | | 3.63 | V |
| | 5 Vdc output voltage | 4.75 | | 5.25 | V |
| | 5.9 Vdc output voltage | 5.70 | | 6.30 | V |
| | 7.5 Vdc output voltage | 7.125 | | 7.875 | V |
| | 9 Vdc output voltage | 8.55 | | 9.45 | V |
| | 12 Vdc output voltage | 11.4 | | 12.60 | V |
| | 15 Vdc output voltage | 14.25 | | 15.75 | V |
| hold-up time | at full load | 10 | | | ms |

PROTECTIONS

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

SAFETY & COMPLIANCE

| parameter | conditions/description | min | typ | max | units |
|----------------------|---------------------------------------|---------|-----|-------|-------|
| isolation voltage | input to output at 10 mA for 1 minute | | | 3,000 | Vac |
| isolation resistance | input to output at 500 Vdc | 10 | | | MΩ |
| safety approvals | certified to 62368: EN | | | | |
| EMI/EMC | CE | | | | |
| MTBF | as per Telcordia SR-332, 25°C | 300,000 | | | hours |
| RoHS | yes | | | | |

ENVIRONMENTAL

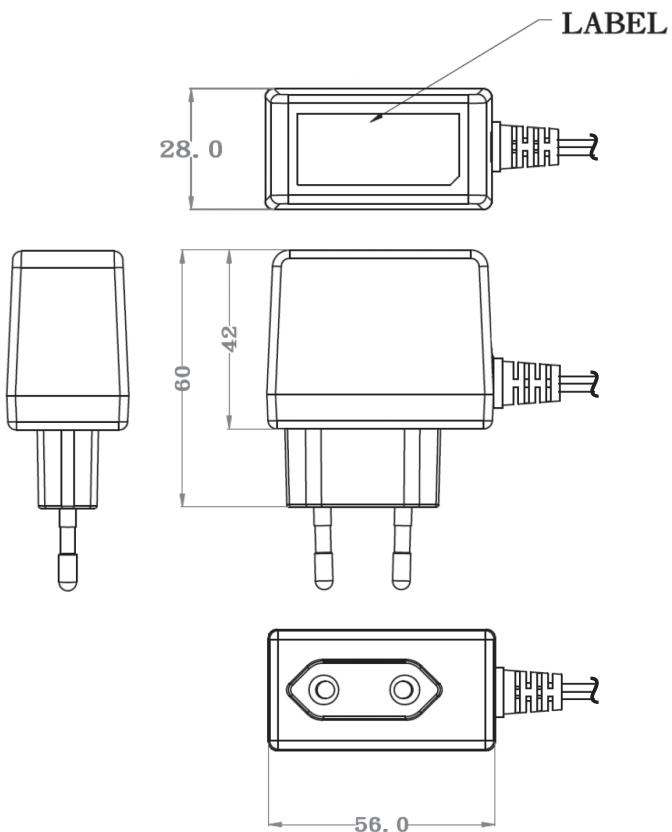
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -20 | | 60 | °C |
| operating humidity | non-condensing | 20 | | 80 | % |
| storage humidity | non-condensing | 10 | | 90 | % |

MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 56 x 28 x 60 | | | | mm |
| inlet plug | Europe | | | | |
| weight | | | | 96 | g |

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

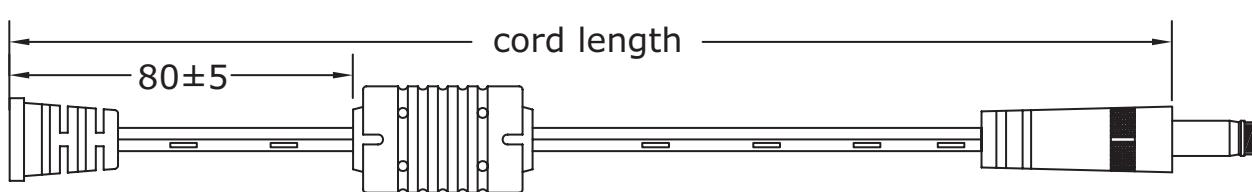


Table 1

| MODEL NO. | CABLE | CORD LENGTH |
|------------|--------|--------------|
| SWI6-3.3-E | UL2468 | 1,500 mm ±30 |
| SWI6-5-E | UL2468 | 1,500 mm ±30 |
| SWI6-5.9-E | UL2468 | 1,500 mm ±30 |
| SWI6-7.5-E | UL2468 | 1,500 mm ±30 |
| SWI6-9-E | UL2468 | 1,500 mm ±30 |
| SWI6-12-E | UL2468 | 1,500 mm ±30 |
| SWI6-15-E | UL2468 | 1,500 mm ±30 |

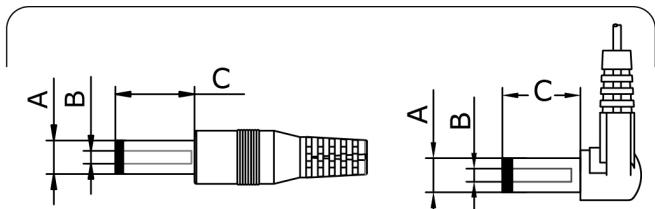
DC PLUG TYPE PART NUMBER KEY

XXX

| Plug Polarity: | | Plug Code: X = Choose a code from the options below | | Plug Angle: "blank" = Straight R = Right Angle | | | | |
|-----------------------|---------------------|---|----------------------|---|------|-------------------|----------|-------|
| P = Center Positive | N = Center Negative | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Plug Polarity | | Code | | Dimensions (mm) | | Plug Angle | | |
| Center Pos. | Center Neg. | Option | Type | A | B | C | Straight | Right |
| • | • | 5 | Standard | 5.5 | 2.1 | 9.5 | • | • |
| • | • | 6 | Standard | 5.5 | 2.5 | 9.5 | • | • |
| • | • | 7 | Standard | 3.5 | 1.35 | 9.5 | • | • |
| • | • | 8 | Standard | 3.8 | 1.35 | 9.5 | • | • |
| • | • | 9 | Standard | 3.8 | 1.05 | 9.5 | • | • |
| • | • | 10 | Locking ² | 5.5 | 2.1 | 9.5 | • | N/A |
| • | • | 11 | Locking ² | 5.5 | 2.5 | 9.5 | • | N/A |
| • | • | 12 | EIAJ-1 | 2.35 | 0.7 | 9.5 | • | • |
| • | • | 13 | EIAJ-2 | 4.0 | 1.7 | 9.5 | • | • |
| • | • | 14 | EIAJ-3 | 4.75 | 1.7 | 9.5 | • | • |
| N/A | N/A | ST | | Stripped & Tinned | | | N/A | N/A |
| N/A | N/A | MUB | USB | Micro USB Type B | | | • | N/A |
| N/A | N/A | CUB | USB | USB Type C | | | • | N/A |

Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

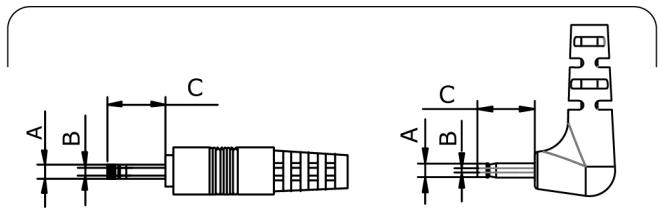
Standard



Straight

Right Angle (R)

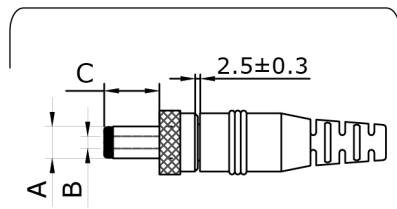
EIAJ



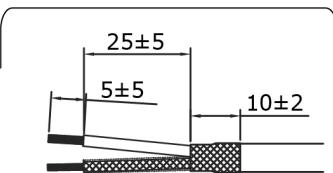
Straight

Right Angle (R)

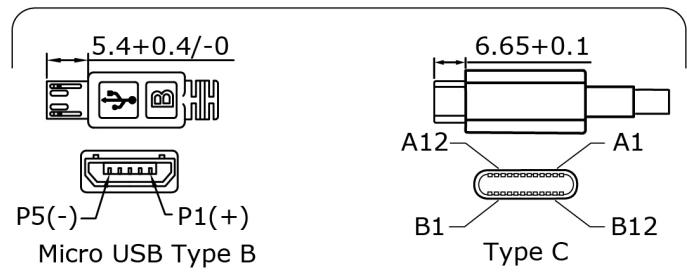
Locking



Stripped & Tinned



USB



REVISION HISTORY

| rev. | description | date |
|------|---------------------------------------|------------|
| 1.0 | initial release | 08/07/2015 |
| 1.01 | added models | 08/12/2015 |
| 1.02 | updated drawing | 12/16/2015 |
| 1.03 | company logo updated | 09/21/2020 |
| 1.04 | updated dc plug options & model table | 12/04/2020 |
| 1.05 | safeties updated | 12/09/2020 |
| 1.06 | plug polarity symbols updated | 09/16/2021 |
| 1.07 | dc plugs updated | 06/15/2022 |
| 1.08 | output voltage updated | 06/21/2023 |
| 1.09 | datasheet updated | 12/02/2024 |

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.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.