



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SERIES: SDI65-U | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

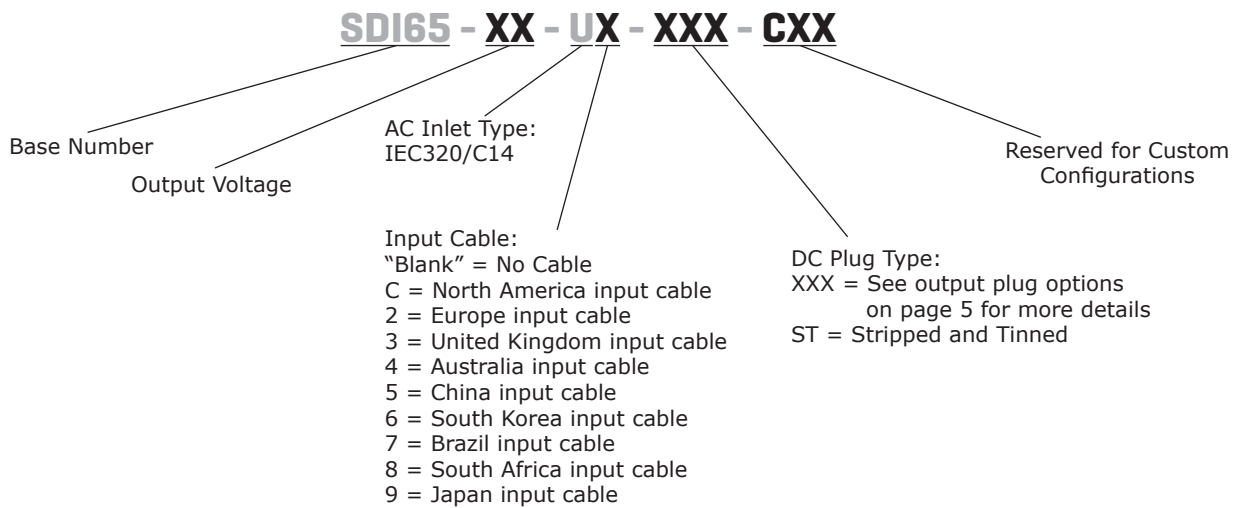
- DoE Level VI, CoC Tier 2 efficiency
- 65 W power
- universal input (90~264 Vac)
- compact size
- single regulated output from 12~48 Vdc
- over voltage and short circuit protections
- UL/cUL, GS, and PSE safety approvals
- custom designs available



| MODEL | output voltage | output current max | output power max | ripple and noise ¹ max | efficiency level ² |
|------------|----------------|--------------------|------------------|-----------------------------------|-------------------------------|
| | (Vdc) | (A) | (W) | (mVp-p) | |
| SDI65-12-U | 12 | 5 | 60 | 120 | VI |
| SDI65-15-U | 15 | 4.34 | 65 | 150 | VI |
| SDI65-18-U | 18 | 3.62 | 65 | 180 | VI |
| SDI65-19-U | 19 | 3.43 | 65 | 190 | VI |
| SDI65-24-U | 24 | 2.71 | 65 | 240 | VI |
| SDI65-48-U | 48 | 1.36 | 65 | 480 | VI |

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 µF multilayer ceramic and 10 µF low ESR electrolytic capacitors.
2. CoC Tier 2 compliant

PART NUMBER KEY



INPUT

| parameter | conditions/description | min | typ | max | units |
|---------------------------|---|-----|-----|---------------|--------|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| current | | | | 1.4 | A |
| inrush current | at 240 Vac, full load, 25°C, cold start | | | 80 | A |
| leakage current | | | | 3.5 | mA |
| no load power consumption | at 230 Vac Level VI CoC Tier 2 | | | 0.21 0.150 | W W |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| regulation | | | ±5 | | % |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|---------------------------------|-----|-----|-----|-------|
| over voltage protection | output latch off | | | 150 | % |
| over current protection | output shut down, auto recovery | | | 180 | % |
| 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 input to frame ground at 10 ma for 1 minute | | 3,000 1,500 | | Vac Vac |
| isolation resistance | input to output at 500 Vdc input to frame ground at 500 Vdc | 10 10 | | | MΩ MΩ |
| safety approvals | UL/cUL, GS, PSE, LPS | | | | |
| EMI/EMC | FCC Part 15B Class B, CE | | | | |
| MTBF | as per Telcordia SR-332, 25°C | 300,000 | | | hours |
| RoHS | 2011/65/EU | | | | |

ENVIRONMENTAL

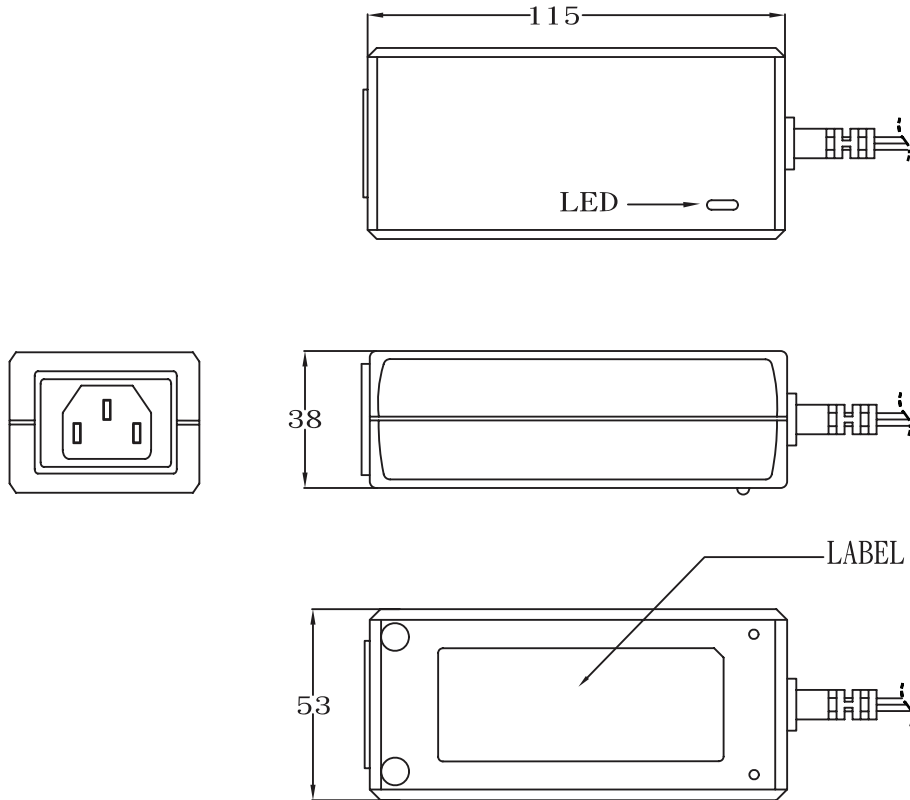
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | | 0 | | 40 | °C |
| storage temperature | | -20 | | 80 | °C |
| operating humidity | non-condensing | 20 | | 80 | % |
| storage humidity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

MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|------------|------------------------|-----|-----|-----|-------|
| dimensions | 115 x 53 x 38 | | | | mm |
| inlet plug | IEC320/C14 | | | | |
| weight | without ac cord | | 310 | | g |

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

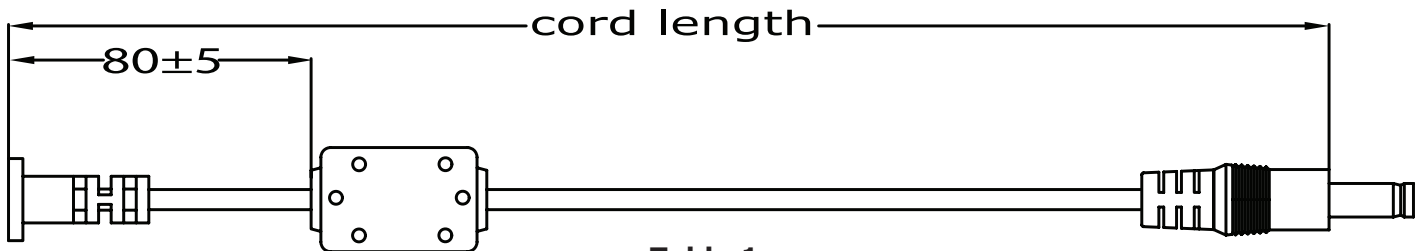


Table 1

| MODEL NO. | CABLE | CORD LENGTH |
|------------|----------------|--------------|
| SDI65-12-U | UL1185, 16 AWG | 1,500 mm ±30 |
| SDI65-15-U | UL1185, 16 AWG | 1,500 mm ±30 |
| SDI65-18-U | UL2468, 18 AWG | 1,500 mm ±30 |
| SDI65-19-U | UL2468, 18 AWG | 1,500 mm ±30 |
| SDI65-24-U | UL2468, 18 AWG | 1,500 mm ±30 |
| SDI65-48-U | UL2468, 20 AWG | 1,500 mm ±30 |

AC CORD

units: mm

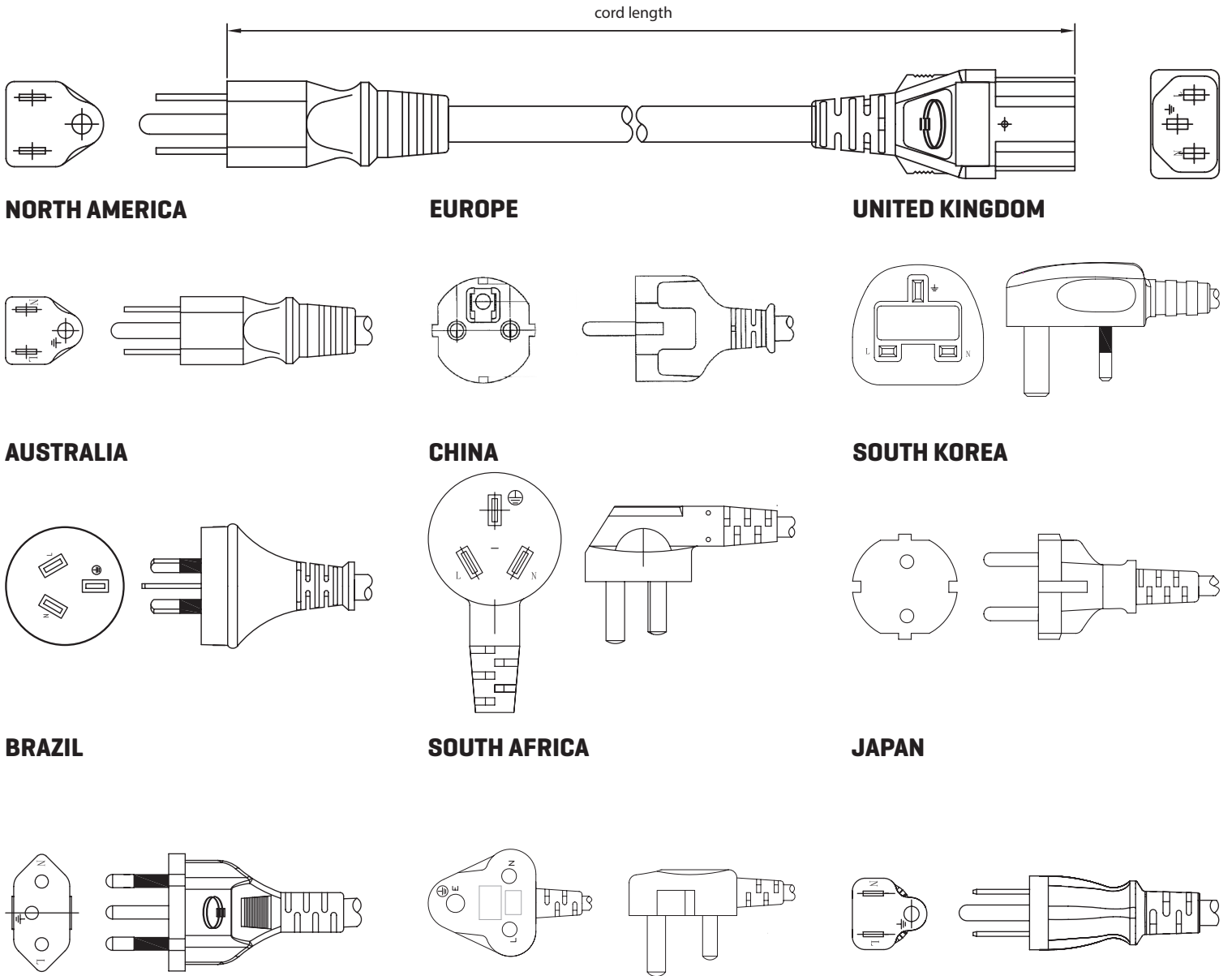
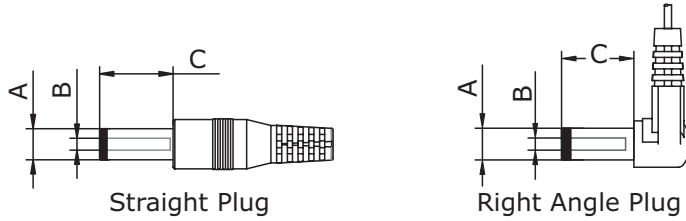


Table 2

| AC INPUT | CORD LENGTH |
|----------------|--------------|
| North America | 1,830 mm ±30 |
| Europe | 1,830 mm ±30 |
| United Kingdom | 1,830 mm ±30 |
| Australia | 1,830 mm ±30 |
| China | 1,830 mm ±30 |
| South Korea | 1,830 mm ±50 |
| Brazil | 1,830 mm ±30 |
| South Africa | 1,830 mm ±50 |
| Japan | 1,830 mm ±30 |

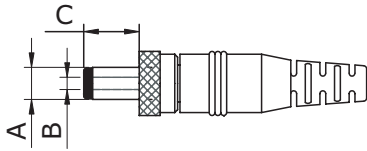
OUTPUT PLUG OPTIONS

Standard DC Plug



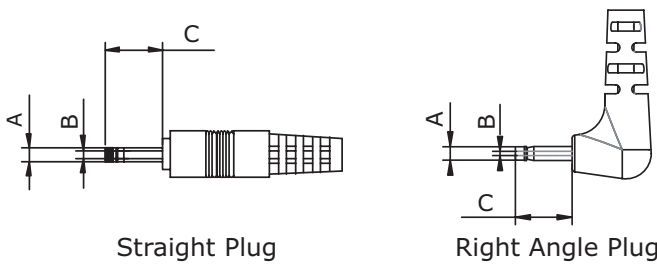
| Size | A | B | C | Unit |
|------|-----|------|-----|------|
| 5 | 5.5 | 2.1 | 9.5 | mm |
| 6 | 5.5 | 2.5 | 9.5 | mm |
| 7 | 3.5 | 1.35 | 9.5 | mm |
| 8 | 3.8 | 1.35 | 9.5 | mm |
| 9 | 3.8 | 1.05 | 9.5 | mm |

Locking DC Plug



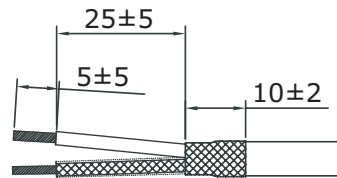
| Size | A | B | C | Unit |
|------|-----|-----|-----|------|
| 10 | 5.5 | 2.1 | 9.5 | mm |
| 11 | 5.5 | 2.5 | 9.5 | mm |

EIAJ DC Plug

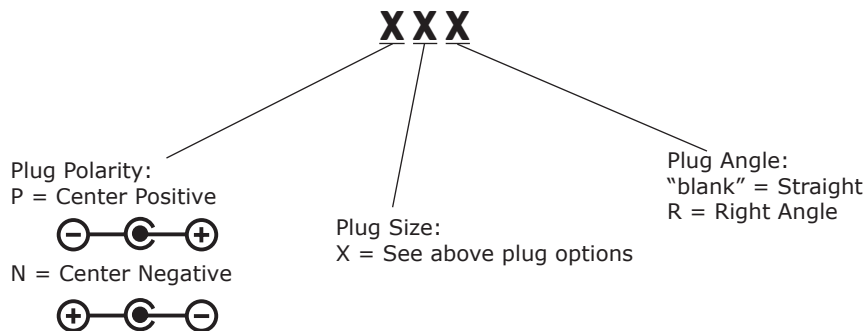


| Size | EIAJ | A | B | C | Unit |
|------|--------|------|-----|-----|------|
| 12 | EIAJ-1 | 2.35 | 0.7 | 9.5 | mm |
| 13 | EIAJ-2 | 4.0 | 1.7 | 9.5 | mm |
| 14 | EIAJ-3 | 4.75 | 1.7 | 9.5 | mm |

Stripped and Tinned



DC Plug Type



*Contact CUI for additional plug options

REVISION HISTORY

| rev. | description | date |
|------|-------------------|------------|
| 1.0 | initial release | 05/13/2015 |
| 1.01 | updated datasheet | 09/15/2016 |

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.

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