



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: SDI50-UD | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

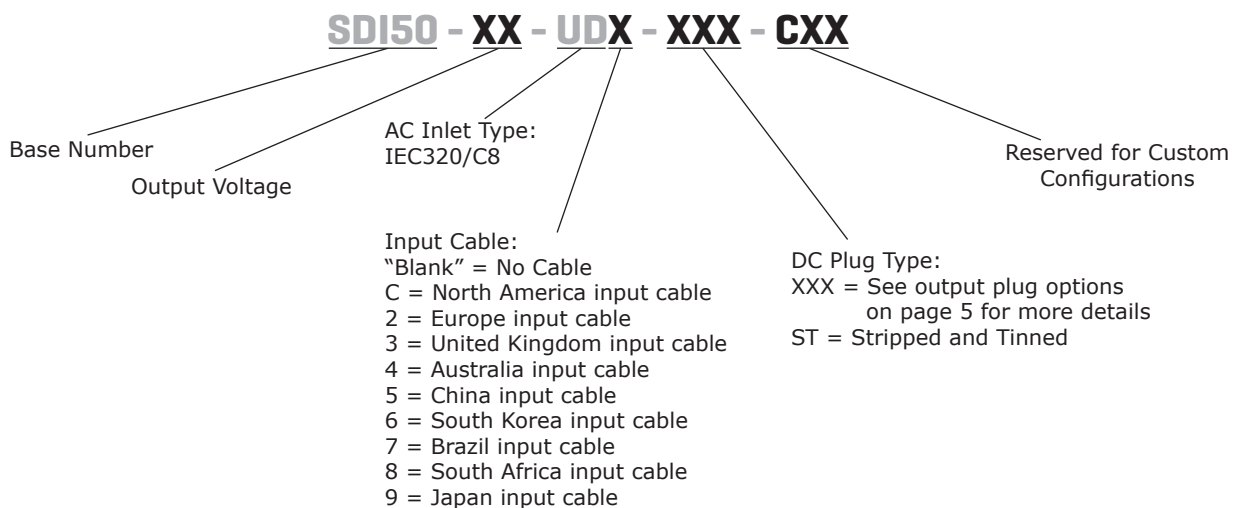
- DoE Level VI, CoC Tier 2 efficiency
- 50 W power
- universal input (90~264 Vac)
- compact size
- single regulated output from 9~48 Vdc
- over voltage and short circuit protections
- UL/cUL, GS, and PSE safety approvals
- custom designs available



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency level ²
SDI50-9-UD	9	5	45	100	VI
SDI50-12-UD	12	4.2	50	120	VI
SDI50-15-UD	15	3.34	50	150	VI
SDI50-18-UD	18	2.78	50	180	VI
SDI50-19-UD	19	2.64	50	190	VI
SDI50-24-UD	24	2.1	50	240	VI
SDI50-48-UD	48	1.05	50	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				1.2	A
inrush current	at 230 Vac, full load, 25°C, cold start			70	A
leakage current				0.25	mA
no load power consumption	at 230 Vac 9 Vdc model all other models			0.10 0.15	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			180	%
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		3,000		Vac
isolation resistance	input to output at 500 Vdc	10			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

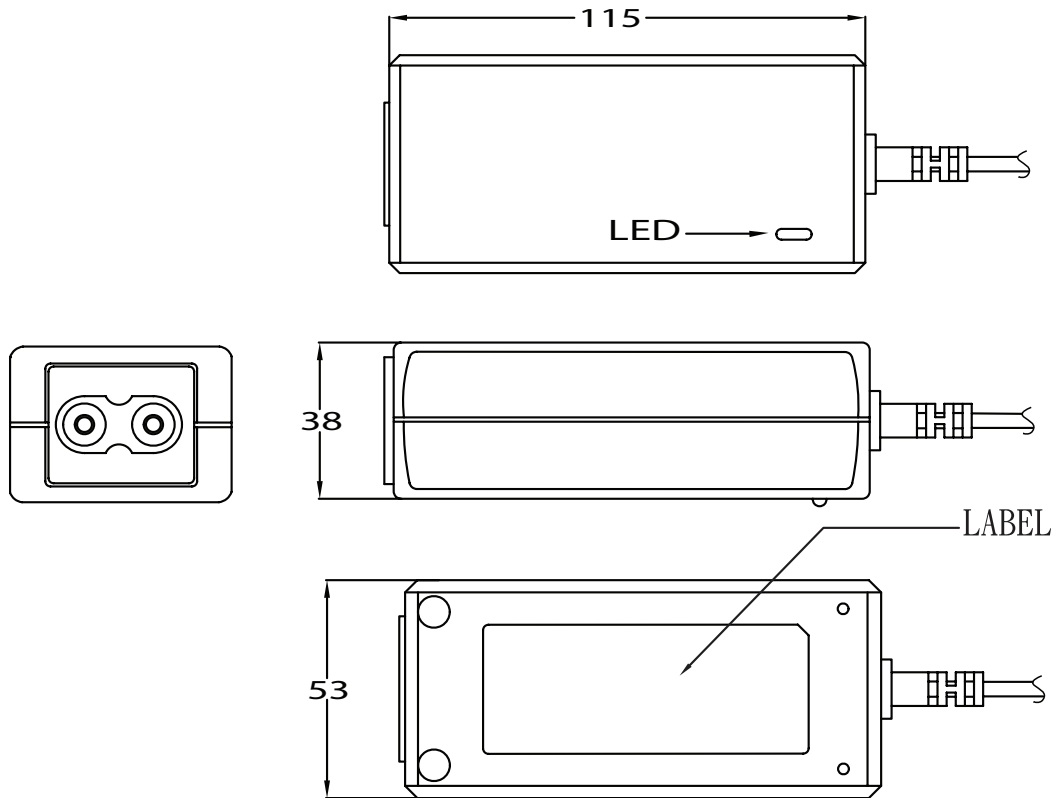
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	115 x 53 x 38				mm
inlet plug	IEC320/C8				
weight	without ac cord		310		g

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

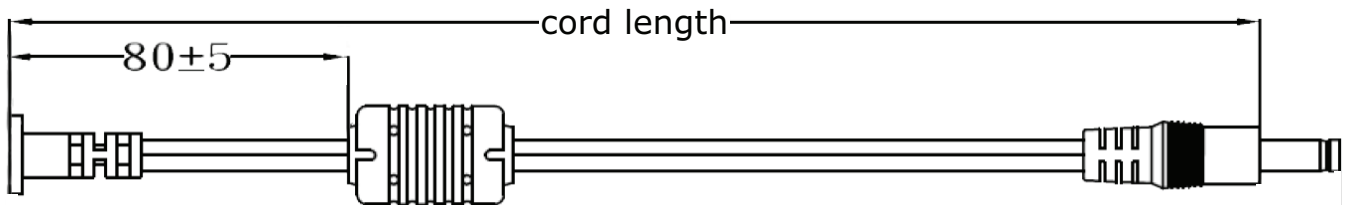


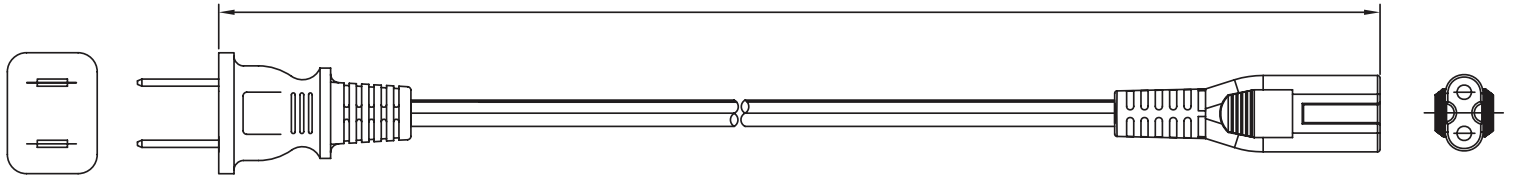
Table 1

MODEL NO.	CABLE	CORD LENGTH
SDI50-9-UD	UL2468, 18 AWG	1,500 mm ±30
SDI50-12-UD	UL2468, 18 AWG	1,500 mm ±30
SDI50-15-UD	UL2468, 18 AWG	1,500 mm ±30
SDI50-18-UD	UL2468, 18 AWG	1,500 mm ±30
SDI50-19-UD	UL2468, 18 AWG	1,500 mm ±30
SDI50-24-UD	UL2468, 18 AWG	1,500 mm ±30
SDI50-48-UD	UL2468, 20 AWG	1,500 mm ±30

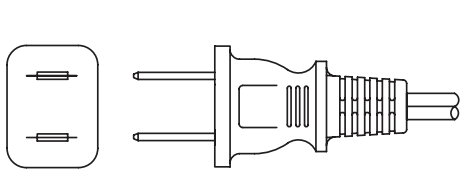
AC CORD

units: mm

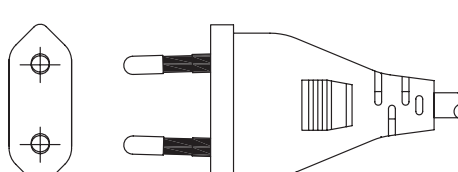
cord length



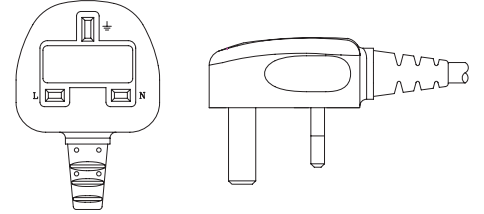
NORTH AMERICA



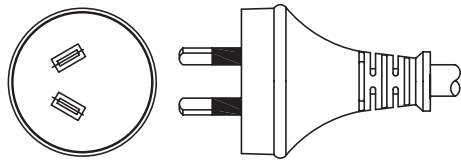
EUROPE



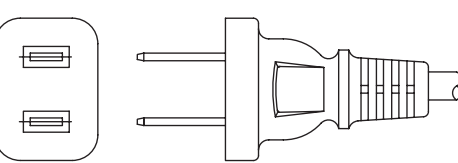
UNITED KINGDOM



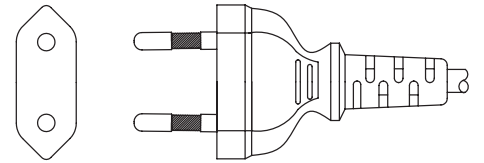
AUSTRALIA



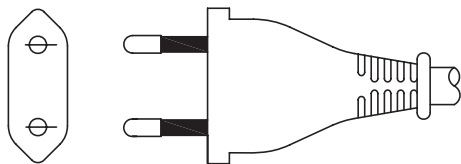
CHINA



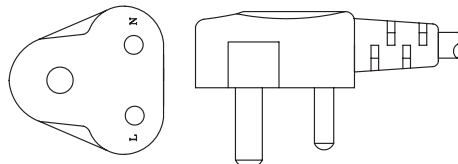
SOUTH KOREA



BRAZIL



SOUTH AFRICA



JAPAN

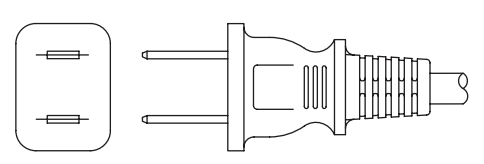
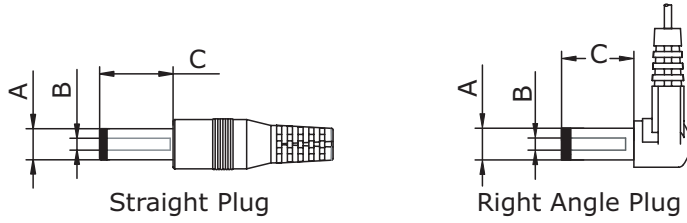


Table 2

AC INPUT	CORD LENGTH
North America	1,830 mm ±50
Europe	1,830 mm ±50
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 ±50

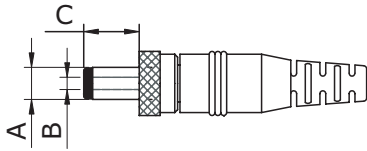
OUTPUT PLUG OPTIONS

Standard DC Plug



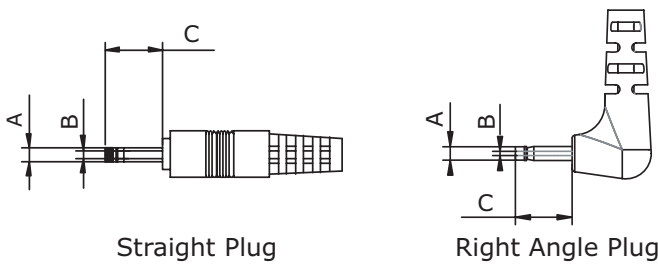
Size	A	B	C	Unit
5	5.5	2.1	9.5	mm
6	5.5	2.5	9.5	mm
7	3.5	1.35	9.5	mm
8	3.8	1.35	9.5	mm
9	3.8	1.05	9.5	mm

Locking DC Plug



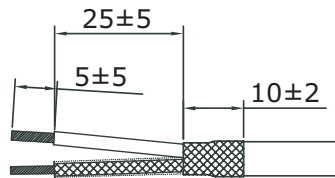
Size	A	B	C	Unit
10	5.5	2.1	9.5	mm
11	5.5	2.5	9.5	mm

EIAJ DC Plug

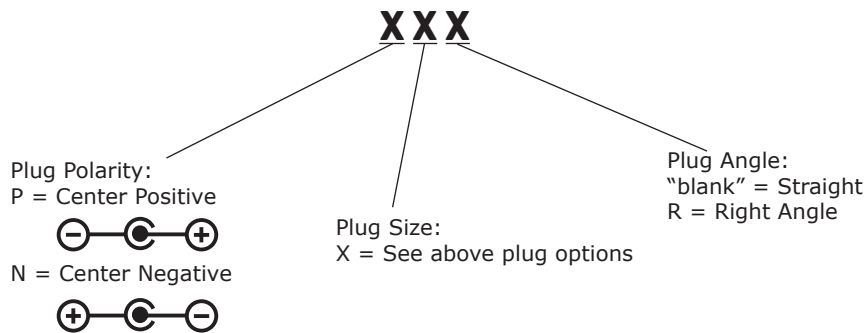


Size	EIAJ	A	B	C	Unit
12	EIAJ-1	2.35	0.7	9.5	mm
13	EIAJ-2	4.0	1.7	9.5	mm
14	EIAJ-3	4.75	1.7	9.5	mm

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.

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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