



SERIES: SWI12-N | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

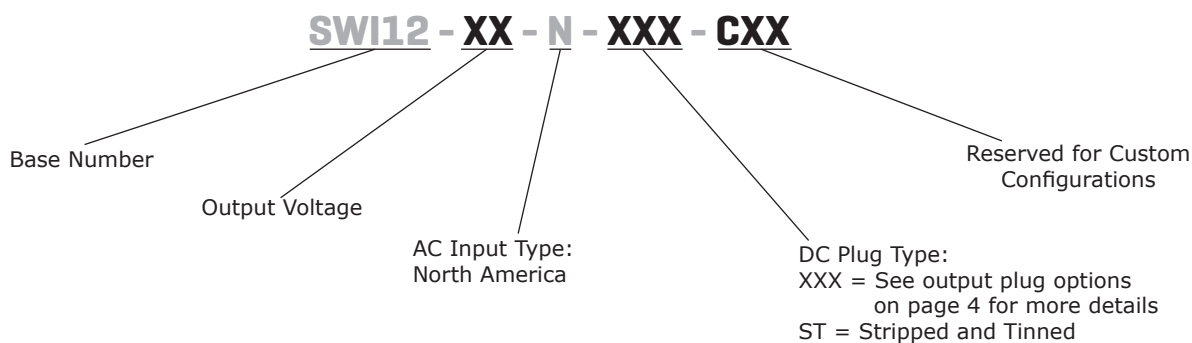
- level VI efficiency
- up to 12 W power
- universal input (90~264 Vac)
- single regulated output from 5~24 Vdc
- over voltage, over current, and short circuit protections
- UL/cUL, PSE safety approvals
- custom designs available



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency level
SWI12-5-N	5	2.5	12.5	100	VI
SWI12-5.9-N	5.9	2.0	11.8	100	VI
SWI12-9-N	9	1.2	10.8	100	VI
SWI12-12-N	12	1.0	12	120	VI
SWI12-24-N	24	0.5	12	240	VI

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.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.31	A
inrush current	at 240 Vac, full load, 25°C, cold start			60	A
leakage current				0.25	mA
no load power consumption	at 115/230 Vac			0.075	W

OUTPUT

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

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down			180	%
over current protection	output shut down, auto recovery				
	5 Vdc model			5.0	A
	5.9 Vdc model			4.5	A
	9 Vdc model			3.0	A
	12 Vdc model			2.5	A
	24 Vdc model			1.5	A
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, LPS, PSE				
EMI/EMC	FCC Part 15B Class B				
MTBF	as per Telcordia SR-332, at 25°C	300,000			hours
RoHS	2011/65/EU				

ENVIRONMENTAL

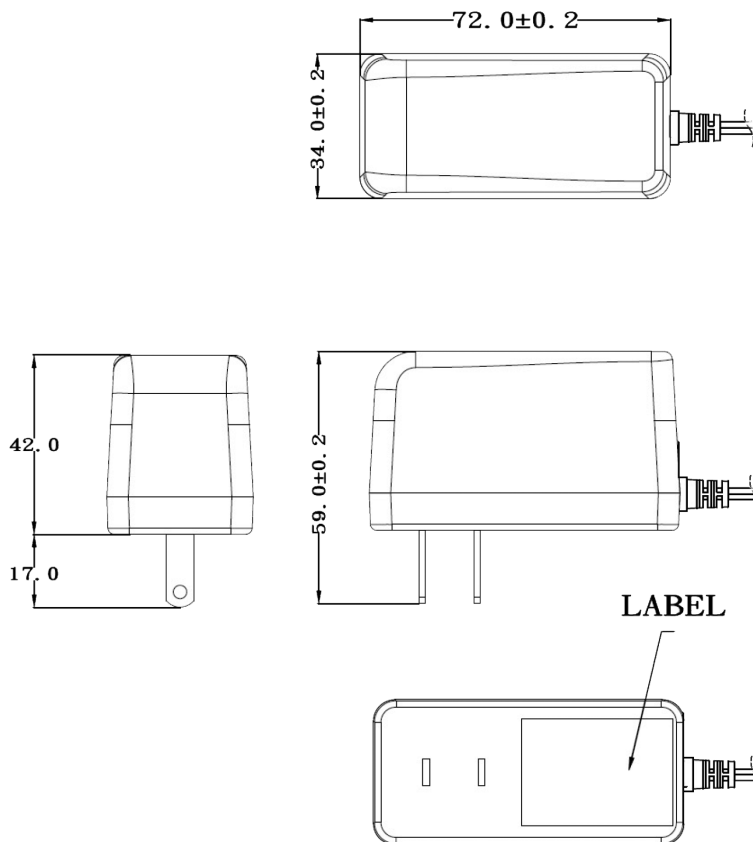
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	72 x 34 x 59				mm
inlet plug	North America, 2-pin				
weight			126		g

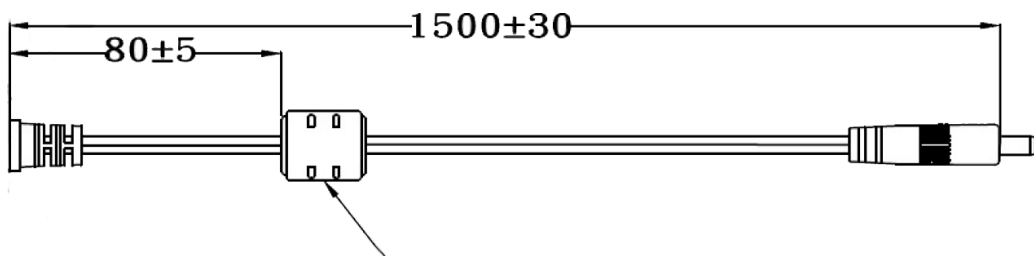
MECHANICAL DRAWING

units: mm



DC CORD

units: mm



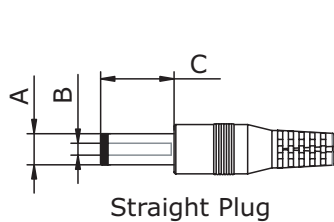
DC cord circled one time to core

Table 1

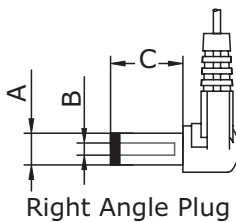
MODEL NO.	CABLE	CORD LENGTH
SWI12-5-N	UL2468, 18 AWG	1,500 mm ±30
SWI12-5.9-N	UL2468, 20 AWG	1,500 mm ±30
SWI12-9-N	UL2468, 20 AWG	1,500 mm ±30
SWI12-12-N	UL2468, 22 AWG	1,500 mm ±30
SWI12-24-N	UL2468, 22 AWG	1,500 mm ±30

OUTPUT PLUG OPTIONS

Standard DC Plug



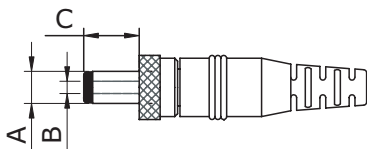
Straight Plug



Right Angle Plug

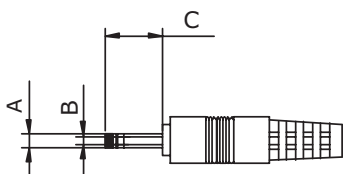
Size	A	B	C	Unit
5	5.5	2.1	9.5	mm
6	5.5	2.5	9.5	mm
7	3.5	1.35	9.5	mm
8	3.8	1.35	9.5	mm
9	3.8	1.05	9.5	mm

Locking DC Plug

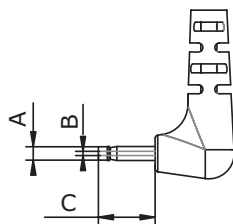


Size	A	B	C	Unit
10	5.5	2.1	9.5	mm
11	5.5	2.5	9.5	mm

EIAJ DC Plug



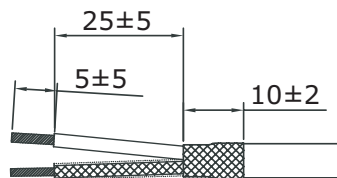
Straight Plug



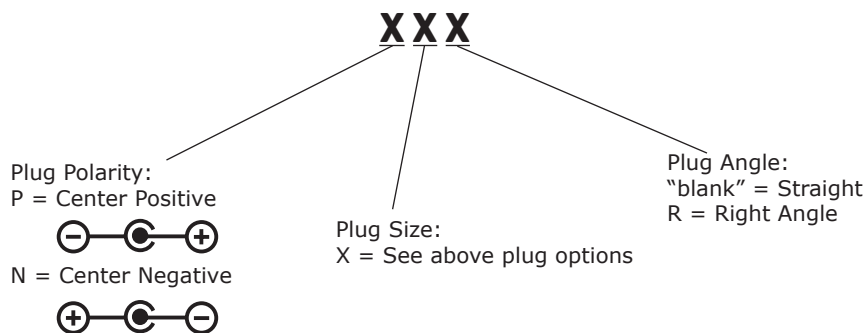
Right Angle Plug

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	04/30/2015
1.01	updated datasheet	06/12/2015

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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