SERIES: SWI12B-N | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

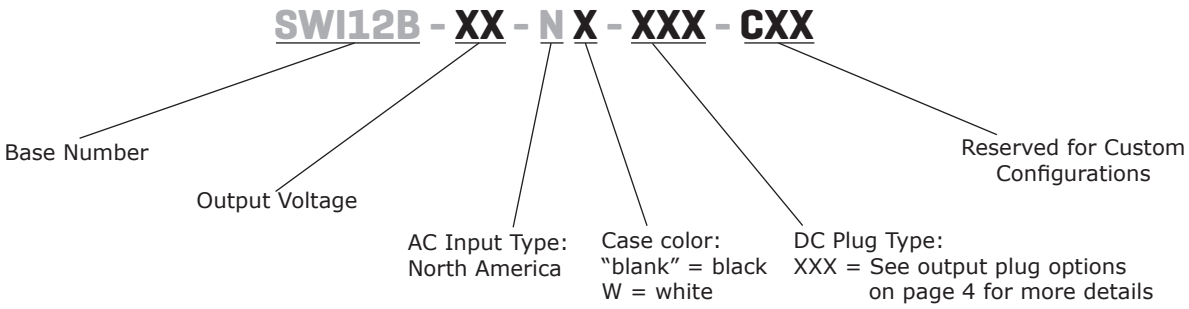
- DoE Level VI efficiency
- up to 12 W power
- universal input (90~264 Vac)
- single regulated output from 5~24 Vdc
- over voltage, over current, and short circuit protections
- UL/cUL safety approvals
- certified to UL 62368-1
- custom designs available

c UL us FC LPS

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
SWI12B-5-N	5	2.0	10.0	300	VI
SWI12B-9-N	9	1.33	11.97	300	VI
SWI12B-12-N	12	1.0	12.0	300	VI
SWI12B-24-N	24	0.5	12.0	300	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.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				0.5	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
load regulation			±5		%
start-up time	at 115 ~ 230 Vac			3	s
rise time	at 115 ~ 230 Vac			100	ms
hold-up time	at 115 ~ 230 Vac	5			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	auto recovery, continuous 5 Vdc model 9 Vdc model 12 Vdc model 24 Vdc model			 12 16 18 36	 Vdc Vdc Vdc Vdc
over current protection	auto recovery 5 Vdc model 9 Vdc model 12 Vdc model 24 Vdc model			 3 2 2 1	 A A A A
short circuit protection	auto recovery, continuous				

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
safety approvals	certified to 62368-1: UL				
EMI/EMC	ICES-003 issue, Class B FCC PART 15 Class B				
ESD	IEC 61000-4-2 contact: ±4 kV, air: ±8 kV				
radiated emissions	IEC 61000-4-3 frequency: 80~1000 MHz, field strength: 3 V/M, 80% AM (1 KHz),				
radiated immunity	EN 55035, EN 61000-4-3				
EFT/burst	EN 61000-4-4 power line: 1 kV, signal line: 0.5 kV				
surge	1 kV				
MTBF	as per Telcordia SR-332 (Issue 2), at 0~40°C	75,000			hours
RoHS	yes				

ENVIRONMENTAL

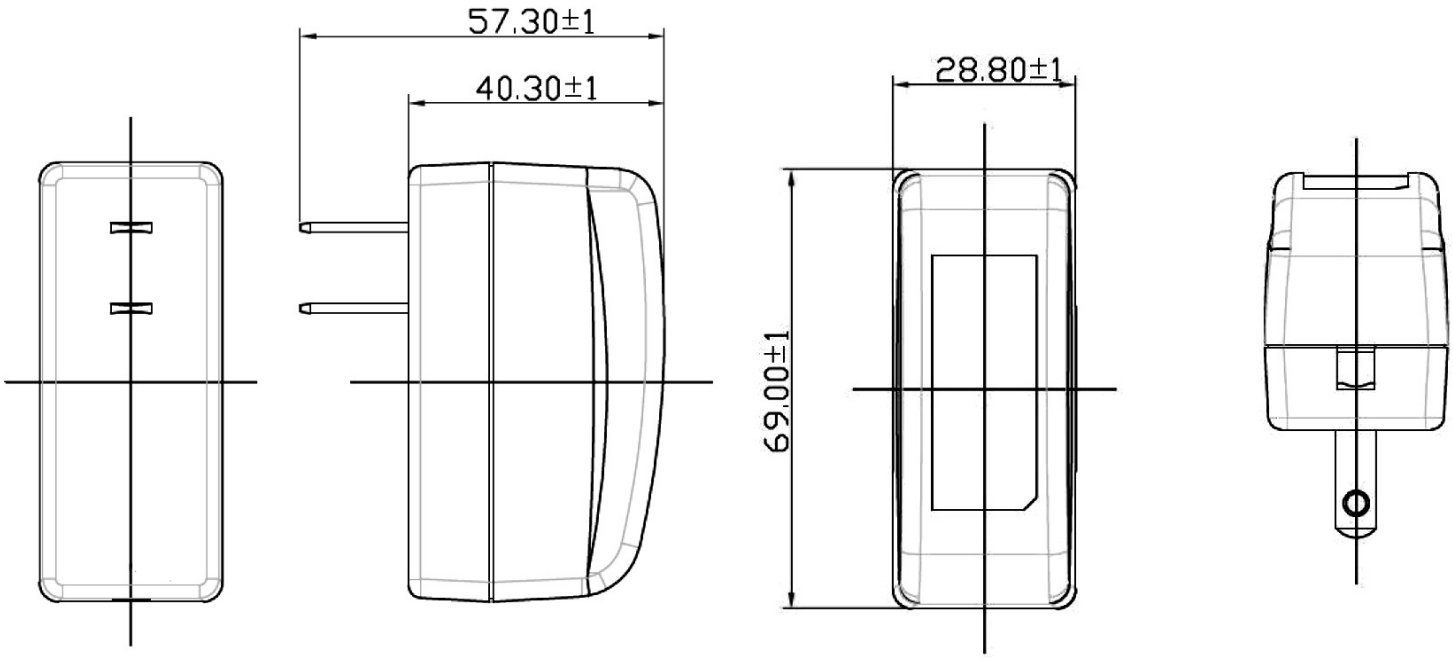
parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		85	%
storage humidity	non-condensing	5		95	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	70.0 (L) x 29.8 (W) x 58.3 (H)				mm
inlet plug	North America, 2-pin				
weight	tolerance: ±15%		80		g

MECHANICAL DRAWING

units: mm
tolerance: ±1.0 mm



DC CORD

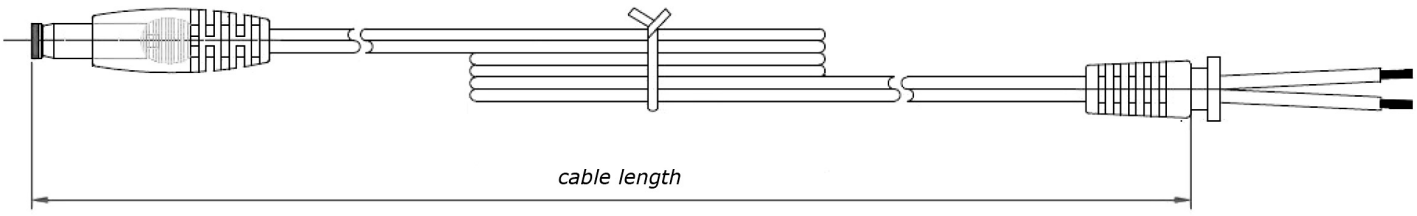


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI12B-5-N	UL2468, 20 AWG	1,500 mm ±30
SWI12B-9-N	UL2468, 22 AWG	1,500 mm ±30
SWI12B-12-N	UL2468, 24 AWG	1,500 mm ±30
SWI12B-24-N	UL2468, 24 AWG	1,500 mm ±30

DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive

N = Center Negative

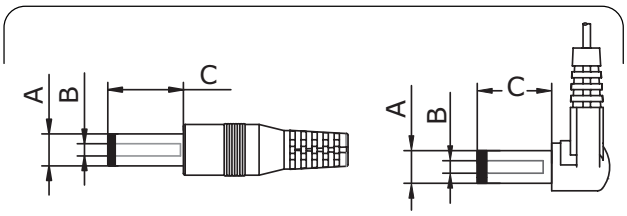
Plug Code:
X = Choose a code from the options below

Plug Angle:
"blank" = Straight
R = Right Angle

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

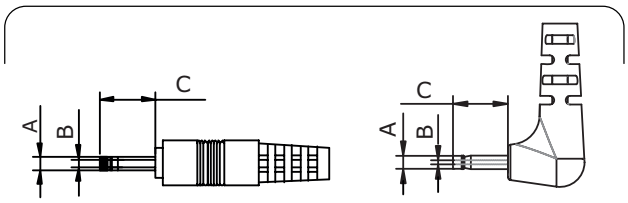
Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

Standard



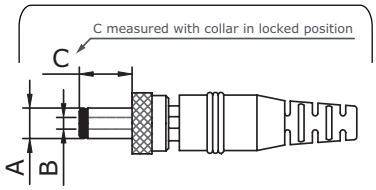
Straight Right Angle (R)

EIAJ

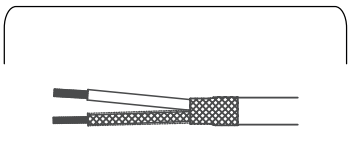


Straight Right Angle (R)

Locking



Stripped & Tinned



REVISION HISTORY

rev.	description	date
1.0	initial release	07/29/2025

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

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