

date 10/06/2025

page 1 of 4

#### **DESCRIPTION:** AC-DC POWER SUPPLY **SERIES:** SWI6AD-N

#### **FEATURES**

- 5W continuous power
- North America fixed blade power supply
- USB-A receptacle 5V/1A
- DoE level VI efficiency
- universal input voltage range
- no load power consumption < 0.1 W
- over current and short circuit protections
- certified to UL 62368-1
- custom designs available





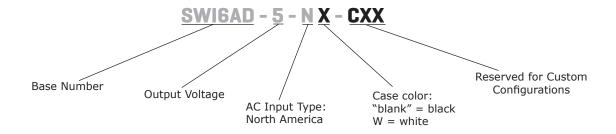




MODEL	input	input	output	output	output	ripple	efficiency
	voltage	frequency	voltage	current	power	and noise¹	level <sup>2</sup>
	<b>range</b>	range	<b>nom</b>	max	max	<b>max</b>	<b>typ</b>
	(Vac)	(Hz)	(Vdc)	(A)	(W)	(mVp-p)	(%)
SWI6AD-N	90 ~ 264	47 ~ 63	5.0	1.0	5.0	200	73.62

1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1  $\mu$ F ceramic and 10  $\mu$ F aluminum electrolytic capacitors. 2. Average efficiency is measured at 115V/60Hz and 230V/50Hz, 25%, 50%, 75%, and 100% load. Notes:

#### **PART NUMBER KEY**



## **INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current	at nominal input voltage			0.18	А
leakage current				0.25	mA
no load power consumption				0.1	W

## **OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation			±5		%
load regulation			±5		%
start-up time	at nominal input voltage & full load			3	S
rise time				50	ms
hold-up time	at nominal input voltage & full load	8			ms

## **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over current protection	auto recovery	110		200	%
short circuit protection	auto recovery		-		

# **SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units	
isolation voltage	input to output for 1 minute, 5 mA max		3,000		Vac	
safety approvals	certified to 62368-1: UL					
EMI/EMC	EN 55032 Class B, FCC PART 15 Class B					
ESD	IEC 61000-4-2: air: ±8 kV, contact: ±4 kV, perf. Criteria B					
radiated immunity	IEC 61000-4-3: frequency: 80 ~ 1000 MHz, field strength: 3 V/m, 80% AM (1kHz), perf. Criteria A					
EFT/burst	IEC 61000-4-4: power line: 1.0 kV, signal lin	e: 0.5 kV, perf. Crite	ria B			
surge	IEC 61000-4-5: power line: ± 1kV, line to ea	arth: ±2 kV, 90°/-270	)°			
MTBF	as per Telcordia SR-332 (Issue 3), at full load, 25°C	300,000			hours	
RoHS	yes					

## **ENVIRONMENTAL**

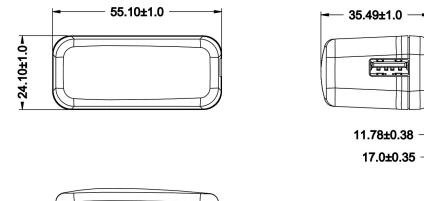
parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-25		80	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	10		90	%

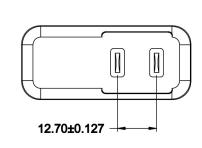
## **MECHANICAL**

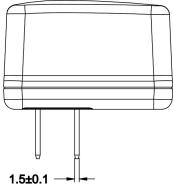
parameter	conditions/description	min	typ	max	units
dimensions	55.1 x 24.1 x 35.49				mm
inlet plug	North America				
output connector	USB Type-A, 4 pin				
weight			34		g

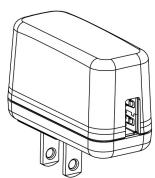
# **MECHANICAL DRAWING**

units: mm











### **REVISION HISTORY**

rev.	description	date
1.0	initial release	10/06/2025

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



15575 SW Sequoia Pkwy #100 Fax 503.612.2383 Portland, OR 97224 800.275.4899

Belfuse.com powersupport@belf.com

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.