

date 08/23/2018

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# SERIES: SWC15-N | DESCRIPTION: AC-DC POWER SUPPLY

#### **FEATURES**

- up to 15 W power
- compact design
- DoE Level VI compliant
- UL/cUL and PSE safety approvals
- universal input voltage range
- USB type C inlet





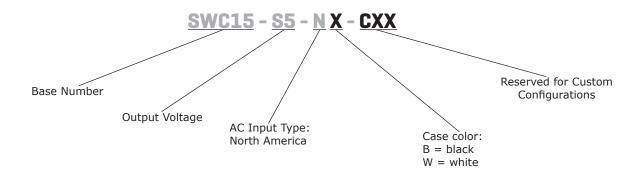




MODEL	output voltage	output current	output power	ripple and noise¹	efficiency level <sup>2</sup>
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	
SWC15-S5-N	5	3	15	150	VI

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. CoC Tier 2 compliant. Notes:

#### **PART NUMBER KEY**



### **INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at 100 Vac			0.5	А
inrush current	at 240 Vac, cold start, 25°C			60	А
leakage current	at max input voltage, full load			0.1	mA
no load power consumption	at 115/230 Vac			0.075	W

# **OUTPUT**

parameter	conditions/description	min	typ	max	units
voltage accuracy		4.75		5.25	Vdc
line regulation			±2		%
load regulation			±5		%
start-up time				3	S
hold-up time	at 115/230 Vac, 60/50 Hz, full load	10			ms

### **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down, auto recovery			9	Vdc
over current protection	output shut down, auto recovery			130	%
short circuit protection	output shut down, auto recovery				

# **SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 3.5 mA for 1 minute		4,242		Vdc
insulation resistance	input to output at 500 Vdc for 1 minute	50			MΩ
safety approvals	UL/cUL (UL 60950-1), PSE				
EMI/EMC	FCC Part 15 Class B, EN 55032 Class B				
MTBF	as per MIL-HDBK-217F, full load, 25°C	50,000			hours
RoHS	yes				

# **ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	5		90	%
altitude				5,000	m

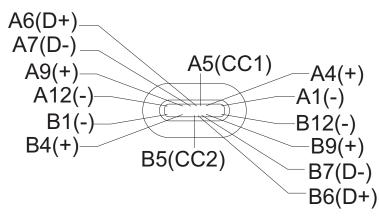
#### **MECHANICAL**

parameter	conditions/description	min	typ	max	units
dimensions	39.6 x 27.4 x 43.3				mm
inlet plug	North America, 2-pin				
DC output	USB 3.1 Type C				
weight			47		g

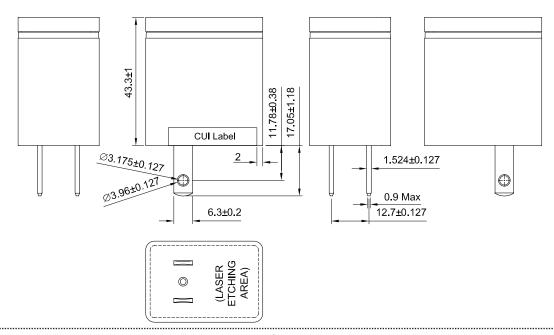
### **MECHANICAL DRAWING**

units: mm

	PIN CONNECTIONS					
PIN	SIGNAL NAME	PIN	SIGNAL NAME			
A1	GND	B12	GND			
A2	NC	B11	NC			
A3	NC	B10	NC			
A4	V <sub>BUS</sub>	В9	V <sub>BUS</sub>			
A5	CC1	В8	CC2			
A6	D+	В7	D+			
A7	D-	В6	D-			
A8	NC	B5	NC			
A9	V <sub>BUS</sub>	В4	V <sub>BUS</sub>			
A10	NC	В3	NC			
A11	NC	B2	NC			
A12	GND	B1	GND			







#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	08/23/2018

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.

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.