


CUI INC

a bel group

date 04/26/2021

page 1 of 4

SERIES: SWC27-N | **DESCRIPTION:** AC-DC POWER SUPPLY

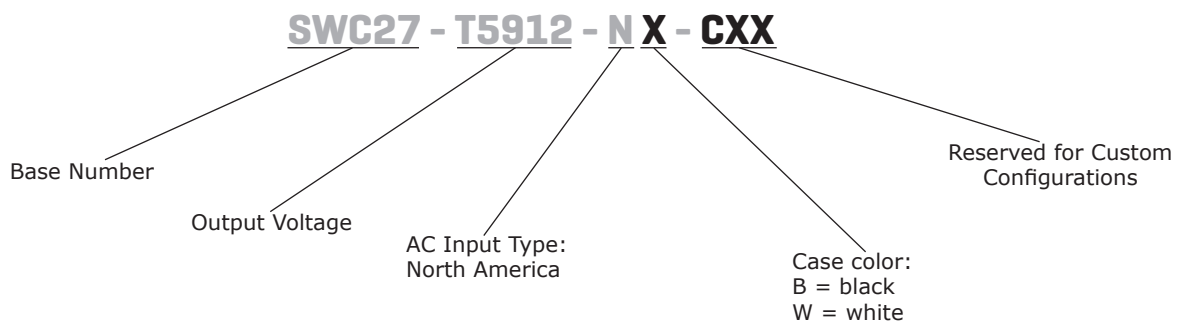
FEATURES

- up to 27 W power
- compact design
- DoE Level VI compliant
- UL/cUL and PSE safety approvals
- universal input voltage range
- USB type C inlet
- power delivery (PD) 3.0


MODEL

	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency level ²
	(Vdc)	(A)	(W)	(mVp-p)	
SWC27-T5912-N	5	3	15	200	VI
	9	3	27	200	VI
	12	2.25	27	200	VI

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 μ F ceramic and 10 μ F aluminum 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	at 100 Vac			0.7	A
inrush current	at 240 Vac, cold start, 25°C			100	A
leakage current	at max input voltage, full load			0.25	mA
no load power consumption	at 115/230 Vac			0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
voltage accuracy	5 Vdc output	4.75		5.5	Vdc
	9 Vdc output	8.55		9.45	Vdc
	12 Vdc output	11.4		12.6	Vdc
line regulation			±2		%
load regulation			±5		%
start-up time				3	s
hold-up time	at 115/230 Vac, 60/50 Hz, full load	5			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down, auto recovery			16	Vdc
over current protection	output shut down, auto recovery			150	%
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

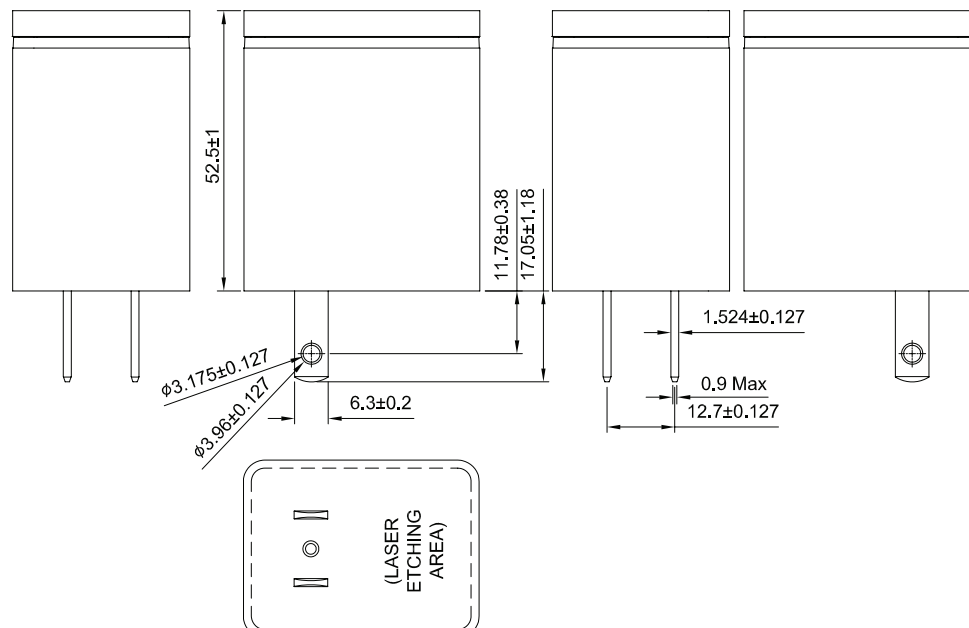
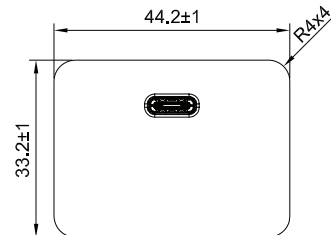
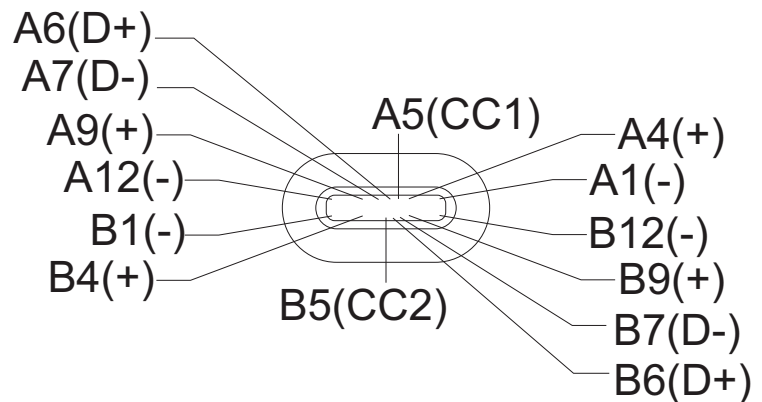
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	44.2 x 33.2 x 52.5				mm
inlet plug	North America, 2-pin				
DC output	USB 3.1 Type C				
weight			89		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 _{BUS}	B9	V _{BUS}
A5	CC1	B8	CC2
A6	D+	B7	D+
A7	D-	B6	D-
A8	NC	B5	NC
A9	V _{BUS}	B4	V _{BUS}
A10	NC	B3	NC
A11	NC	B2	NC
A12	GND	B1	GND



REVISION HISTORY

rev.	description	date
1.0	initial release	08/23/2018
1.01	company logo updated	09/30/2020
1.02	safety marks updated	04/26/2021

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.