

SERIES: SWI20CB-N | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

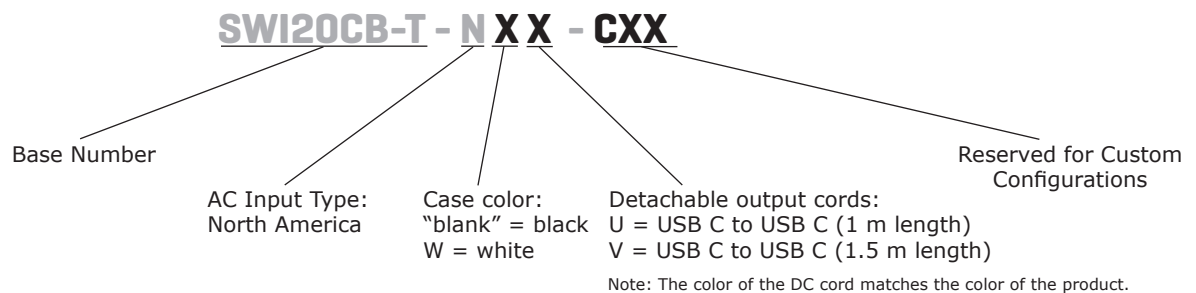
- up to 20W of continuous power
- universal input voltage range
- US fixed blade input
- integrated USB Type C receptacle
- USB Power Delivery (PD)
- 5,9,12 Vdc output
- over-voltage, short circuit, over current protection
- certified to UL 62368-1
- customization available



MODEL	input voltage range (Vac)	input frequency range (Hz)	output voltage typ (Vdc)	output current max (A)	output power max (W)	ripple and noise ¹ max (mVp-p)	efficiency level
SWI20CB-T-N	90 ~ 264	47 ~ 63	5	3.0	15	120	VI
	90 ~ 264	47 ~ 63	9	2.22	20	180	VI
	90 ~ 264	47 ~ 63	12	1.67	20	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.

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 100 ~ 240 Vac			0.6	A
leakage current				0.25	mA
no load power consumption	at 230 Vac			0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
load regulation			±5		%
line regulation			±5		%
start-up time				3	s
rise time				100	ms
hold-up time	at 115 ~ 230 Vac, full load	8			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	internal protection clamp				
over current protection	auto recovery or latch mode			4.5	A
short circuit protection	auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 5 mA for 1 minute input to output at 5 mA for 2 seconds		3,000 3,600		Vac Vac
safety approvals	certified to 62368-1: UL cUL/UL				
EMI/EMC	EN 55032 Class B FCC PART 15 Class B, NRCan				
ESD	EN 55035, EN 61000-4-2 contact: ±5 kV, air: ±10 kV, perf. Criteria B				
radiated immunity	EN 55035, EN 61000-4-3 frequency: 80~1000MHz, field strength: 3V/M, 80% AM (1kHz), perf. Criteria A				
EFT/Burst	EN 55035, EN 61000-4-4 power line 1 kV, perf. Criteria B				
surge	EN 55035, EN 61000-4-5 power line 1 kV, line to earth 2 kV, +90° / -270°				
conducted immunity	EN 55035, EN 61000-4-6 frequency range: 150 kHz ~ 230 MHz, field strength: 3A/m with 80% amplitude modulation of 1kHz, perf. Criteria A				
MTBF	as per Telcordia SR-332 Issue 3, full load, at 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

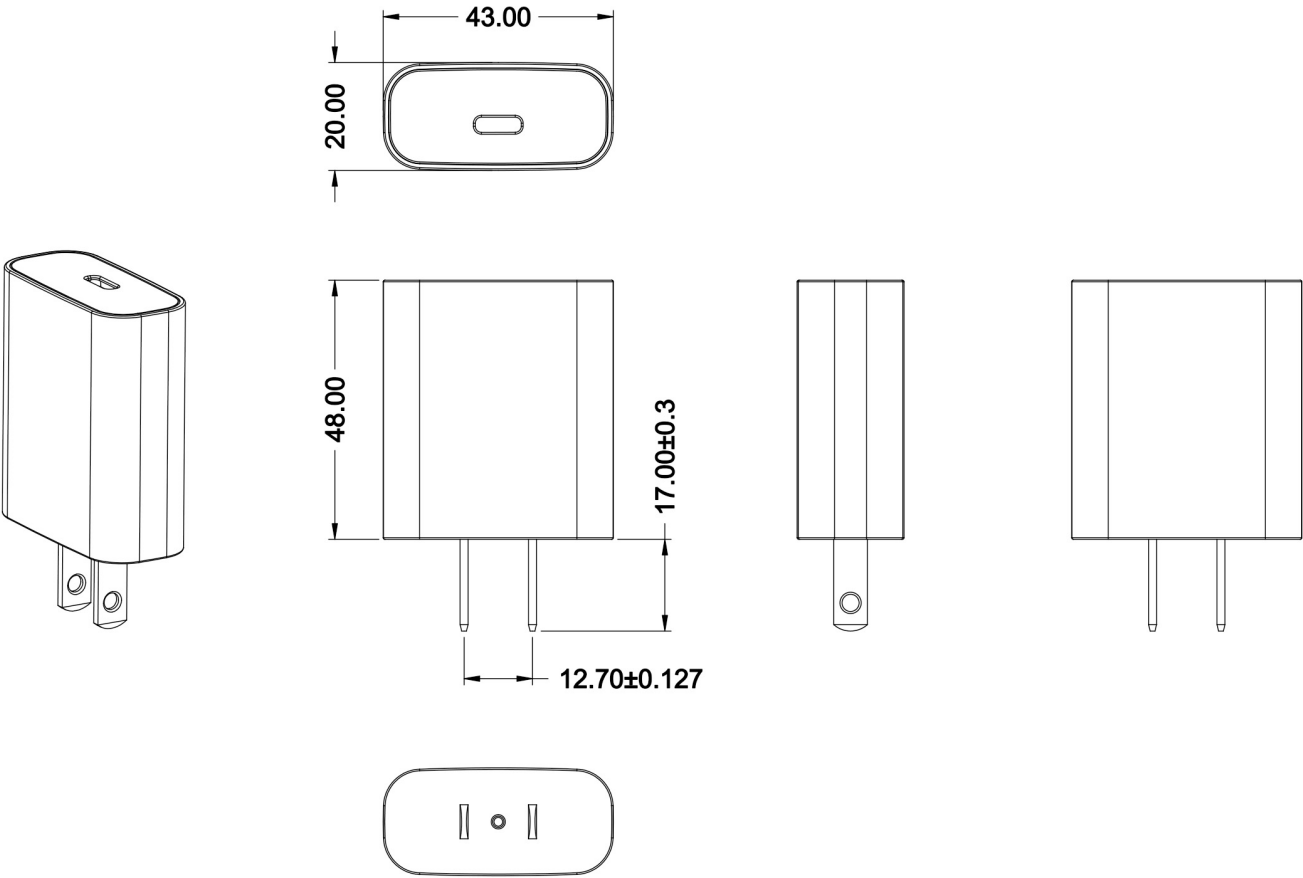
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		70	°C
operating humidity	non-condensing	5		95	%
storage humidity	non-condensing	5		95	%

MECHANICAL

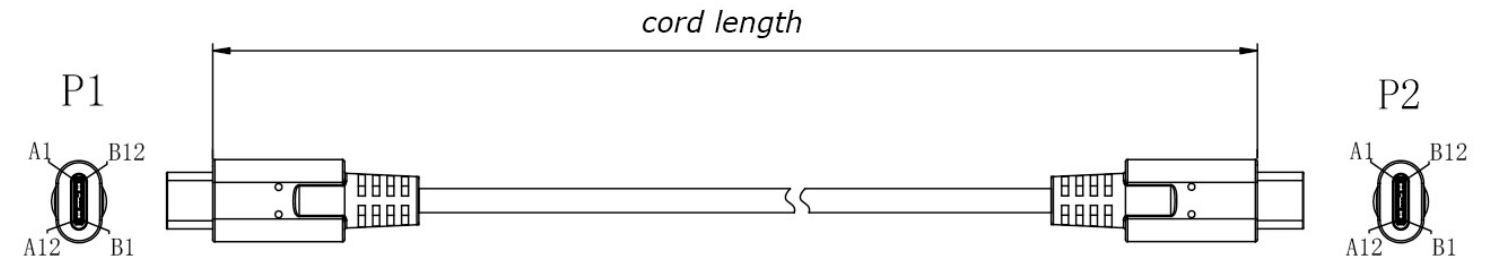
parameter	conditions/description	min	typ	max	units
dimensions	48.0 (L) x 43.0 (W) x 20.0 (H)				mm
inlet plug	2 pin, US				
output connector	USB type-C				
weight			42.9		g

MECHANICAL DRAWING

units: mm



DC CORD



Plugs: USB-C to USB-C
Length: 1,000/1,500 mm
Color: black/white

REVISION HISTORY

rev.	description	date
1.0	initial release	08/13/2025

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.