CUI INC
a bel group

SERIES: SWI10B-E | **DESCRIPTION:** AC-DC POWER SUPPLY

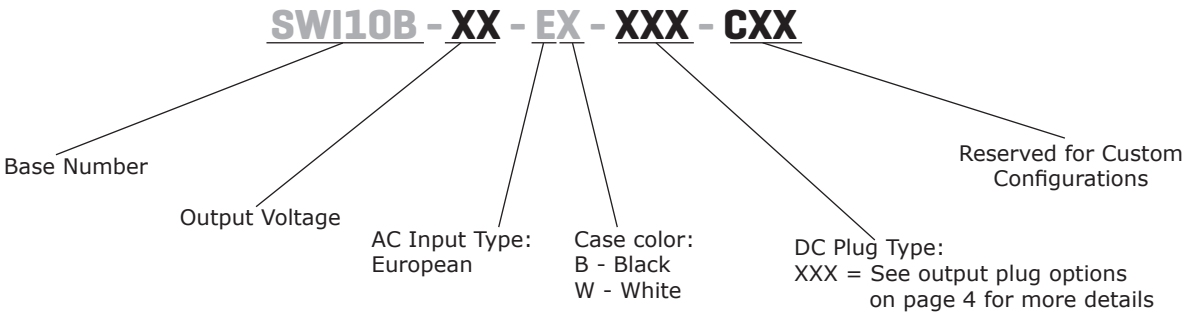
FEATURES

- up to 12 W continuous power
- DoE Level VI efficiency
- universal input voltage range
- ultra-compact case
- no load power consumption < 0.075 W
- over voltage, over current, and short circuit protections
- certified to IEC 62368-1 standards
- CE safety approval
- Class II construction
- black and white case options available

MODEL	input voltage	input frequency	output voltage	output current	output power	ripple and noise[1]	efficiency level		no load power consumption
	range (Vac)	range (Hz)	nom (Vdc)	max (A)	max (W)	max (mVp-p)	average[2] (%)	10% (%)	typ (W)
SWI10B-5-E	90 ~ 264	47 ~ 63	5	2	10	300	79.9	76.1	0.06
SWI10B-12-E	90 ~ 264	47 ~ 63	12	1	12	180	84.0	79.3	0.06

Notes: 1. At full load, nominal AC input voltage, 25°C, 20 MHz bandwidth oscilloscope, output terminated with 0.1 μF and 10 μF capacitors to ground.
2. Average efficiency is measured at 25%, 50%, 75%, and 100% load.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at nominal input voltage			0.5	A
leakage current	at nominal input voltage & frequency			0.25	mA
no load power consumption	at 115/230 Vac			0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation			±5		%
start-up time	at nominal input voltage			3	s
rise time	at nominal input voltage			100	ms
hold up time		5			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	5 Vdc output model 12 Vdc output model			10 18	Vdc Vdc
over current protection	output shut down, auto recovery 5 Vdc output model 12 Vdc output model			 3.0 1.8	 A A
short circuit protection	yes				

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	CE				
EMI/EMC	EN55032:2015, EN55035:2017				
MTBF	as per Telcordia SR-332 (Issue 2), at 115/230 Vac, full load, 0°C~40°C	50,000			hours
RoHS	yes				

ENVIRONMENTAL

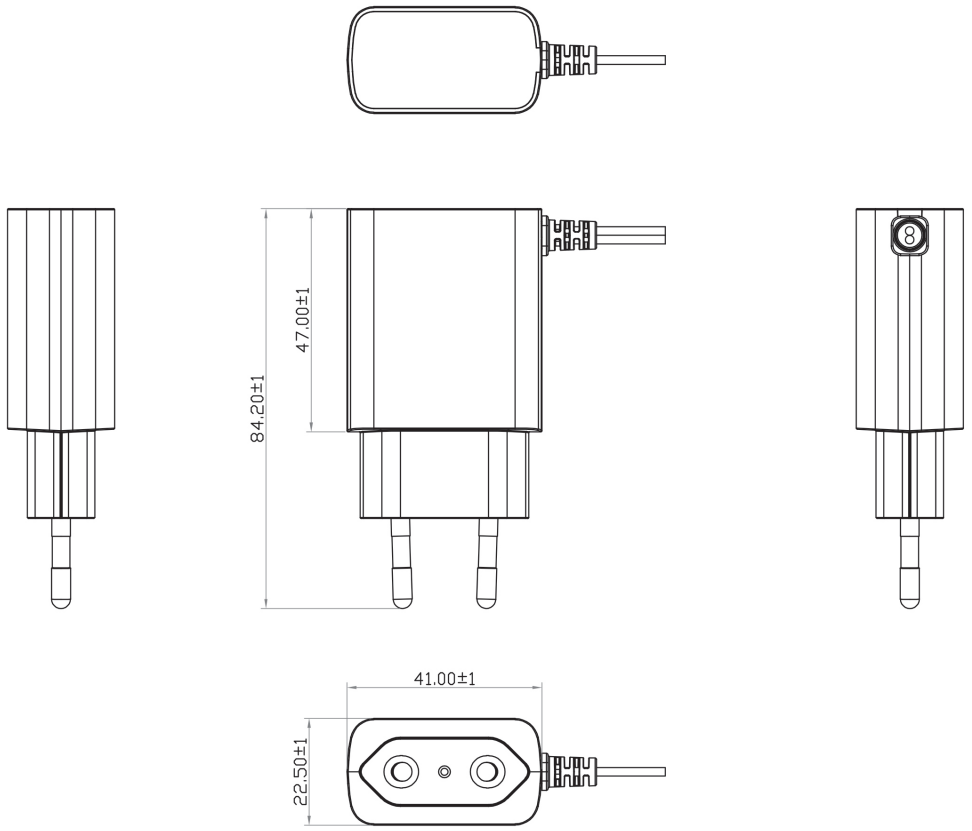
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		85	%
storage humidity	non-condensing	5		95	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	85.2 x 42 x 23.5				mm
inlet plug	EU, 2-pin				
weight			66		g

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

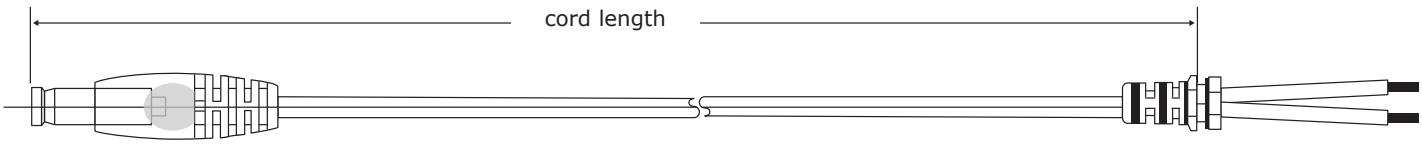


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI10B-5-E	UL2468, 20 AWG	1,500 mm ±50
SWI10B-12-E	UL2468, 24 AWG	1,500 mm ±50

DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive

N = Center Negative

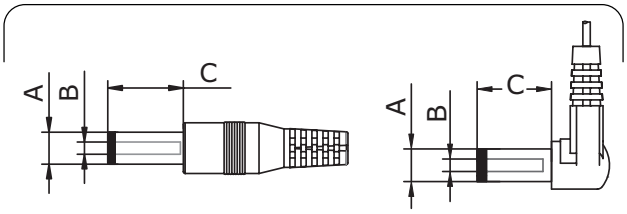
Plug Code:
X = Choose a code from the options below

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
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A

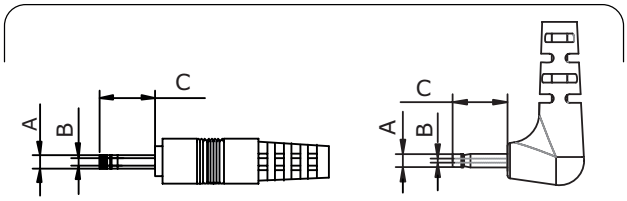
Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

Standard



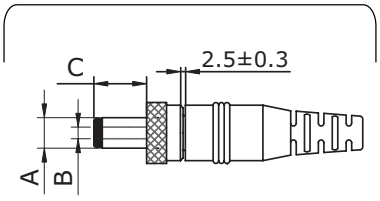
Straight Right Angle (R)

EIAJ

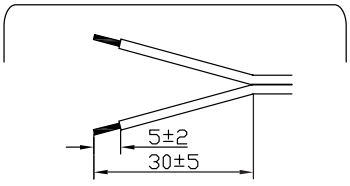


Straight Right Angle (R)

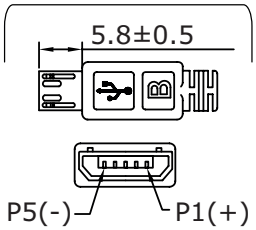
Locking



Stripped & Tinned



USB



REVISION HISTORY

rev.	description	date
1.0	initial release	04/22/2020
1.01	model table updated	11/27/2020
1.02	plug polarity symbols updated	09/16/2021
1.03	dc plugs updated	04/25/2022

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

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CUI offers a two (2) 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.