SERIES: SWI6D-N | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

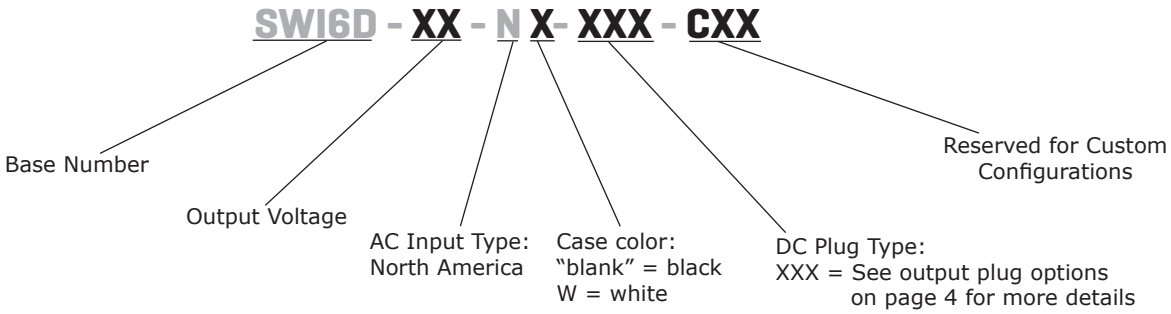
- up to 6 W continuous power
- DoE Level VI efficiency
- no load power consumption < 0.1 W
- universal input voltage range
- over current and short circuit protections
- UL/cUL and CE safety approval
- certified to IEC 62368-1
- custom designs available

MODEL

MODEL	input voltage range (Vac)	input frequency range (Hz)	output voltage nom (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level[2] typ (%)
SWI6D-5-N	90 ~ 264	47 ~ 63	5.0	1.0	5.0	100	73.62
SWI6D-5B-N	90 ~ 264	47 ~ 63	5.0	1.2	6.0	120	75.18
SWI6D-5.9-N	90 ~ 264	47 ~ 63	5.9	1.0	5.9	120	75.05
SWI6D-7.5-N	90 ~ 264	47 ~ 63	7.5	0.8	6.0	120	78.88
SWI6D-9-N	90 ~ 264	47 ~ 63	9.0	0.66	5.94	150	78.97
SWI6D-12-N	90 ~ 264	47 ~ 63	12.0	0.5	6.0	200	78.88

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

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	A
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			4	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				
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: IEC UL/cUL				
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 B				
EFT/burst	IEC 61000-4-4: 1.0 kV on input AC power ports, perf. Criteria B				
surge	IEC 61000-4-5: line to line: ± 1kV (peak), line to earth: ±2 kV				
MTBF	as per Telcordia SR-332 (Issue 3), at full load, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

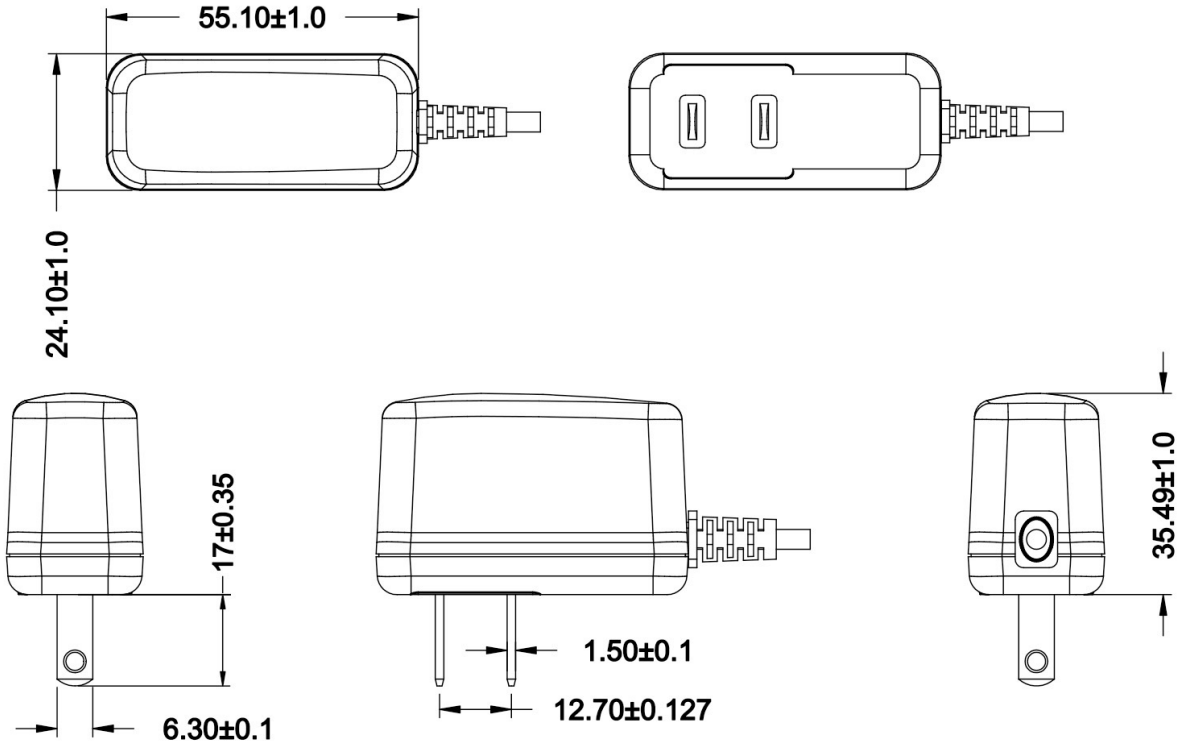
parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-25		80	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	55.1 x 24.1 x 35.49				mm
inlet plug	North America				
weight			70		g

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

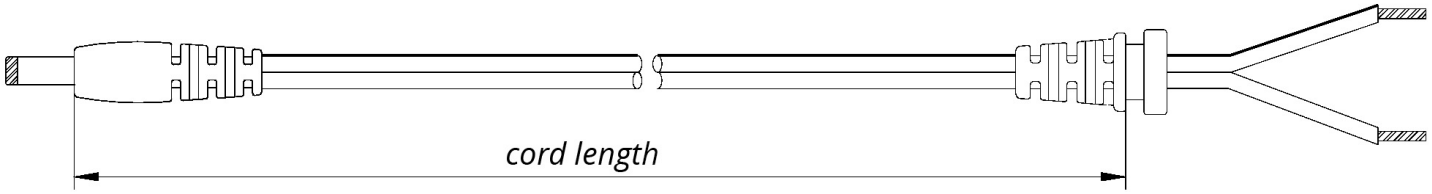


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI6D-5-N	UL2468, 24 AWG	1,500 mm ±80
SWI6D-5B-N	UL2468, 22 AWG	1,500 mm ±80
SWI6D-5.9-N	UL2468, 24 AWG	1,500 mm ±80
SWI6D-7.5-N	UL2468, 22 AWG	1,500 mm ±80
SWI6D-9-N	UL2468, 24 AWG	1,500 mm ±80
SWI6D-12-N	UL2468, 24 AWG	1,500 mm ±80

DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive

N = Center Negative

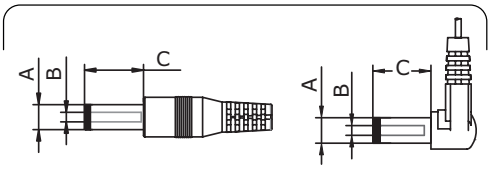
Plug Code:
X = Choose a code from the options below

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
N/A	N/A	P1[1]	Audio	3.5	N/A	14	•	N/A
•	•	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	M	USB	Micro USB Type B			•	N/A
N/A	N/A	C	USB	USB Type C			•	N/A

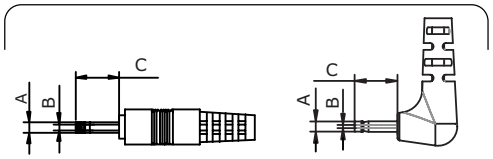
Note: 1. Tip positive
2. Maximum insertion depth is 10mm
3. Contact CUI for additional plug options

Standard



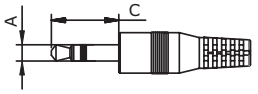
Straight Right Angle (R)

EIAJ

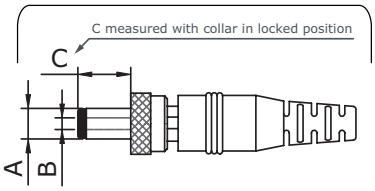


Straight Right Angle (R)

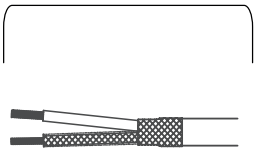
Audio



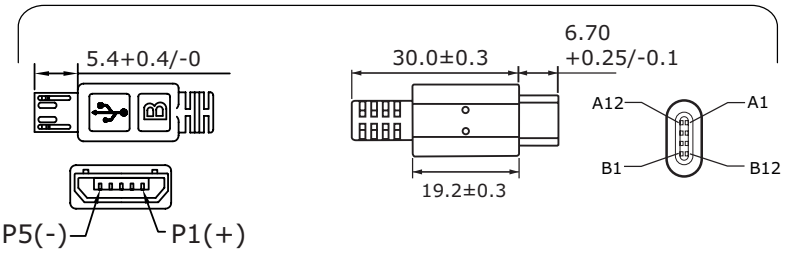
Locking



Stripped & Tinned



USB



Micro USB Type B Type C

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.

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