SERIES: SWI6-E | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- up to 6 W continuous power
- DOE Level VI, CEC, ErP Stage 2
- no load power consumption < 0.1 W
- compact size
- universal input voltage range
- over voltage, over current, and short circuit protections
- CE safety approvals
- certified to EN 62368

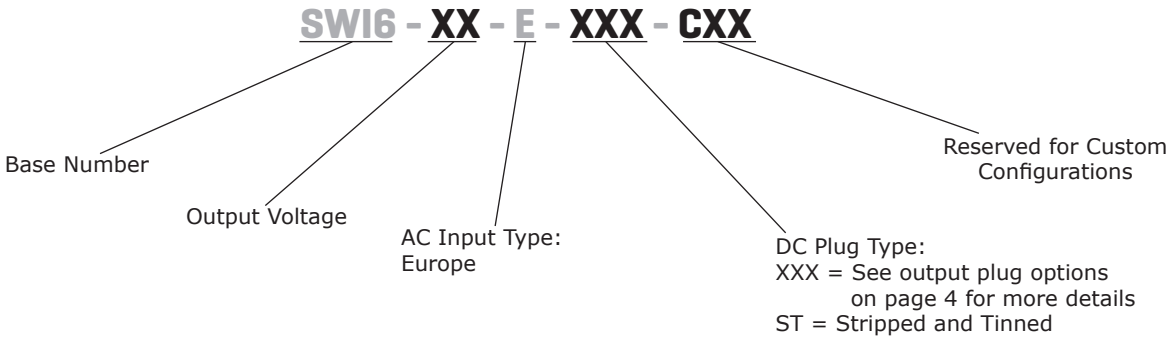
RoHS CE

MODEL

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)
SWI6-3.3-E	90 ~ 264	47 ~ 63	3.3	1.5	4.95	100	74.0	63.3	0.03
SWI6-5-E	90 ~ 264	47 ~ 63	5.0	1.5	7.5	100	77.5	66.7	0.05
SWI6-5.9-E	90 ~ 264	47 ~ 63	5.9	1.2	7.08	100	78.7	65.0	0.05
SWI6-7.5-E	90 ~ 264	47 ~ 63	7.5	1.0	7.5	100	80.3	70.1	0.04
SWI6-9-E	90 ~ 264	47 ~ 63	9.0	0.67	6.03	100	79.9	66.6	0.04
SWI6-12-E	90 ~ 264	47 ~ 63	12.0	0.6	7.2	120	80.9	65.1	0.05
SWI6-15-E	90 ~ 264	47 ~ 63	15.0	0.5	7.5	150	80.9	63.3	0.06

Notes: 1. At full load, nominal input, 20 MHz bandwidth oscilloscope, each output terminated with 0.1 µF multilayer ceramic and 47 µF low ESR electrolytic capacitors.
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	100~240	264	Vac
frequency		47	50~60	63	Hz
current				0.19	A
inrush current	at 240 Vac, full load, 25°C, cold start			60	A
leakage current				0.25	mA
no load power consumption				0.1	W

OUTPUT

parameter	conditions/description	min	typ	max	units
regulation	3.3 Vdc output voltage	2.97		3.63	V
	5 Vdc output voltage	4.75		5.25	V
	5.9 Vdc output voltage	5.70		6.30	V
	7.5 Vdc output voltage	7.125		7.875	V
	9 Vdc output voltage	8.55		9.45	V
	12 Vdc output voltage	11.4		12.60	V
	15 Vdc output voltage	14.25		15.75	V
hold-up time	at full load	10			ms

PROTECTIONS

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

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute		3,000		Vac
isolation resistance	input to output at 500 Vdc	10			MΩ
safety approvals	certified to 62368: EN				
EMI/EMC	CE				
MTBF	as per Telcordia SR-332, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

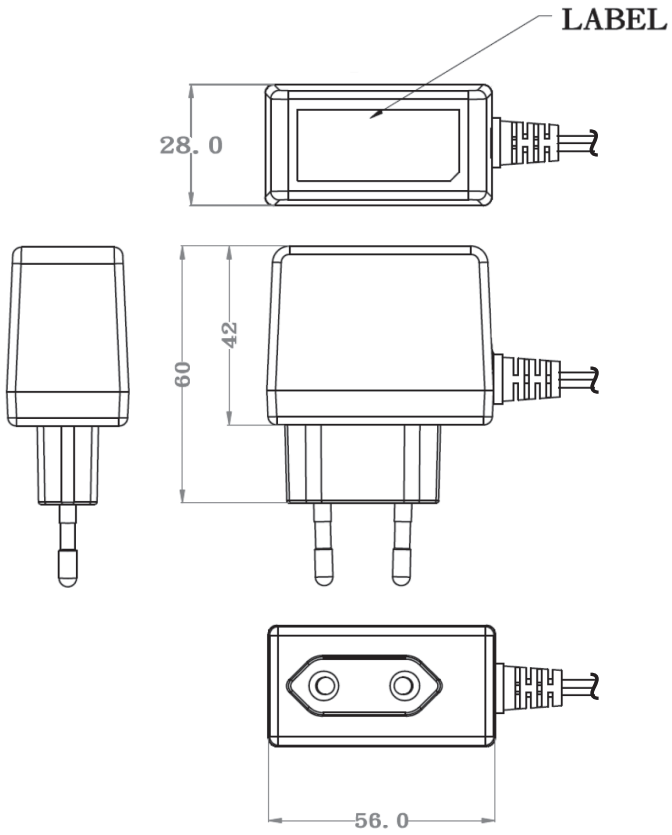
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-20		60	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	56 x 28 x 60				mm
inlet plug	Europe				
weight			96		g

MECHANICAL DRAWING

units: mm



DC CORD

units: mm

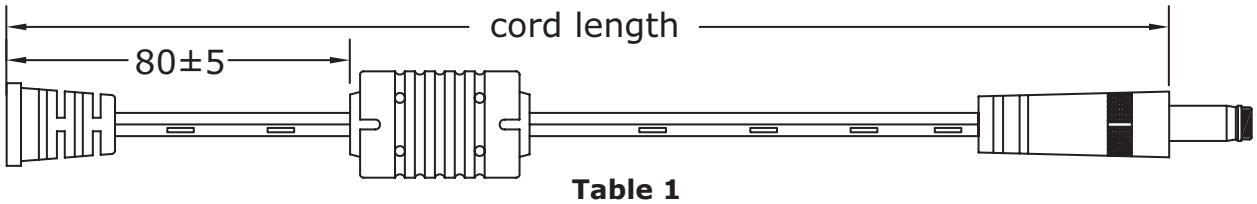


Table 1

MODEL NO.	CABLE	CORD LENGTH
SWI6-3.3-E	UL2468	1,500 mm ±30
SWI6-5-E	UL2468	1,500 mm ±30
SWI6-5.9-E	UL2468	1,500 mm ±30
SWI6-7.5-E	UL2468	1,500 mm ±30
SWI6-9-E	UL2468	1,500 mm ±30
SWI6-12-E	UL2468	1,500 mm ±30
SWI6-15-E	UL2468	1,500 mm ±30

DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive

N = Center Negative

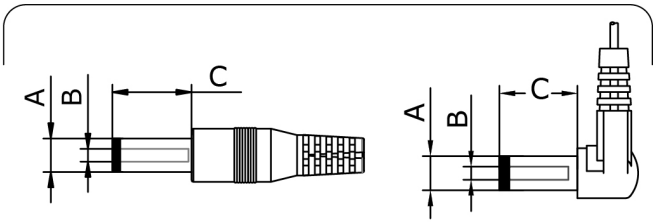
Plug Code:
X = Choose a code from the options below

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
N/A	N/A	CUB	USB	USB Type C			•	N/A

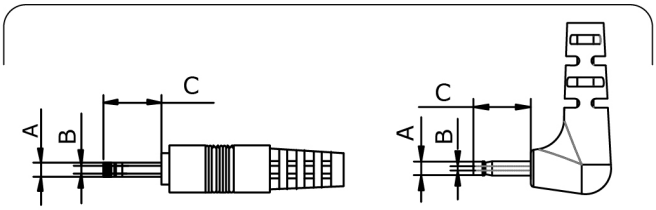
Note: 1. Contact CUI for additional plug options
2. Maximum insertion depth is 10mm

Standard



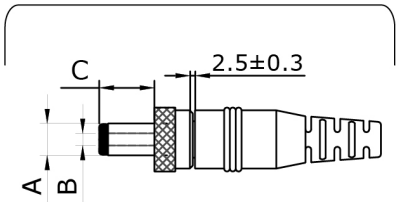
Straight Right Angle (R)

EIAJ

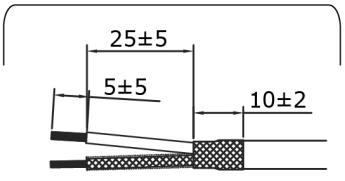


Straight Right Angle (R)

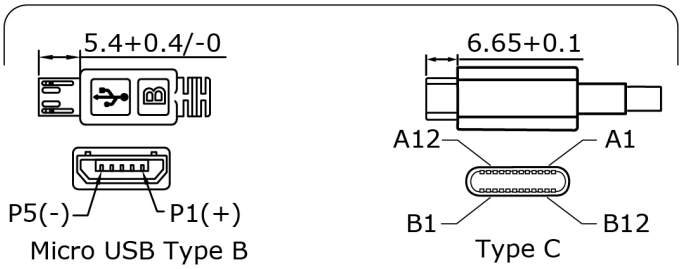
Locking



Stripped & Tinned



USB



Micro USB Type B Type C

REVISION HISTORY

rev.	description	date
1.0	initial release	08/07/2015
1.01	added models	08/12/2015
1.02	updated drawing	12/16/2015
1.03	company logo updated	09/21/2020
1.04	updated dc plug options & model table	12/04/2020
1.05	safeties updated	12/09/2020
1.06	plug polarity symbols updated	09/16/2021
1.07	dc plugs updated	06/15/2022
1.08	output voltage updated	06/21/2023
1.09	datasheet updated	12/02/2024

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

CUI INC
a bel group

Headquarters
15575 SW Sequoia Pkwy #100
Portland, OR 97224
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com