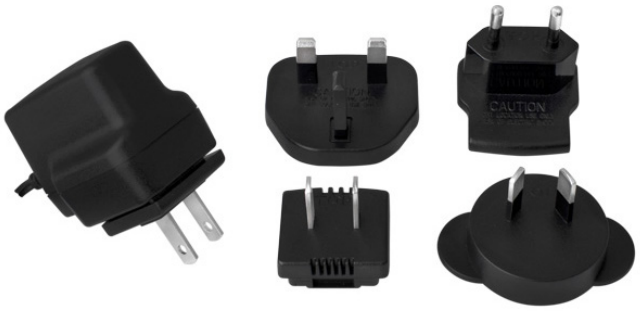
SERIES: SMI6D | **DESCRIPTION:** AC-DC POWER SUPPLY

FEATURES

- up to 6 W continuous power
- DoE Level VI efficiency
- interchangeable AC blades
- no load power consumption <0.1W
- universal input voltage range
- LPS rated
- over voltage and short circuit, and over current protections
- UL/cUL & CE safety approvals
- certified to UL/EN/IEC 62368-1



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 (%)	no load power consumption typ (W)
SMI6D-5	90 ~ 264	47 ~ 63	5.0	1.0	5.0	100	73.62	0.1
SMI6D-5B	90 ~ 264	47 ~ 63	5.0	1.2	6.0	120	75.18	0.1
SMI6D-5.9	90 ~ 264	47 ~ 63	5.9	1.0	5.9	120	75.05	0.1
SMI6D-7.5	90 ~ 264	47 ~ 63	7.5	0.8	6.0	120	78.88	0.1
SMI6D-9	90 ~ 264	47 ~ 63	9.0	0.66	5.94	150	78.97	0.1
SMI6D-12	90 ~ 264	47 ~ 63	12.0	0.5	6.0	150	78.88	0.1

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

SMI6D - XX - X X - XXX - CXX

- **SMI6D** — Base Number
- **XX** — Output Voltage
- **X** — Blades:
  - 3 = North America, Europe, United Kingdom included
  - 4 = North America, Europe, United Kingdom, and Australia blades included
  - V = North America, Europe, United Kingdom, Australia, and China blades included
  - N = North America blade included
  - E = Europe blade included
  - B = United Kingdom blade included
  - A = Australia blade included
  - C = China blade included
  - K = No blades included
- **X** — Color:
  - "blank" = black
  - W = white
- **XXX** — DC Plug Type:
  - XXX = See output plug options on page 5 for more details
- **CXX** — Reserved for Custom Configurations

Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	100~240	264	Vac
frequency		47	50~60	63	Hz
current				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			3	s
rise time				50	ms
hold-up time	at 100 Vac, full load	8			ms

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	clamped by internal protection				
over current protection		110		200	%
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		3,000		Vac
safety approvals	certified to 62368-1: UL, EN, IEC				
EMI/EMC	EN 55032 Class B, FCC PART 15 Class B, CE				
ESD	IEC 61000-4-2 contact: ±4 kV, air: ±8 kv, perf. Criteria A				
radiated immunity	IEC 61000-4-3 frequency: 80 ~ 1000 MHz, field strength: 3V/M with 80% AM (1KHz), perf. Criteria A EN 61000-4-3, EN 55035				
EFT/burst	EN 61000-4-4 power line: 1 kV, signal line: 0.5 kV, perf. Criteria B				
surge	power line: 1 kV, line to earth: 2 kV, 90°/-270°				
MTBF	as per Telcordia SR-332 (Issue 3), at full load, 25°C	300,000			hours
RoHS	yes				

ENVIRONMENTAL

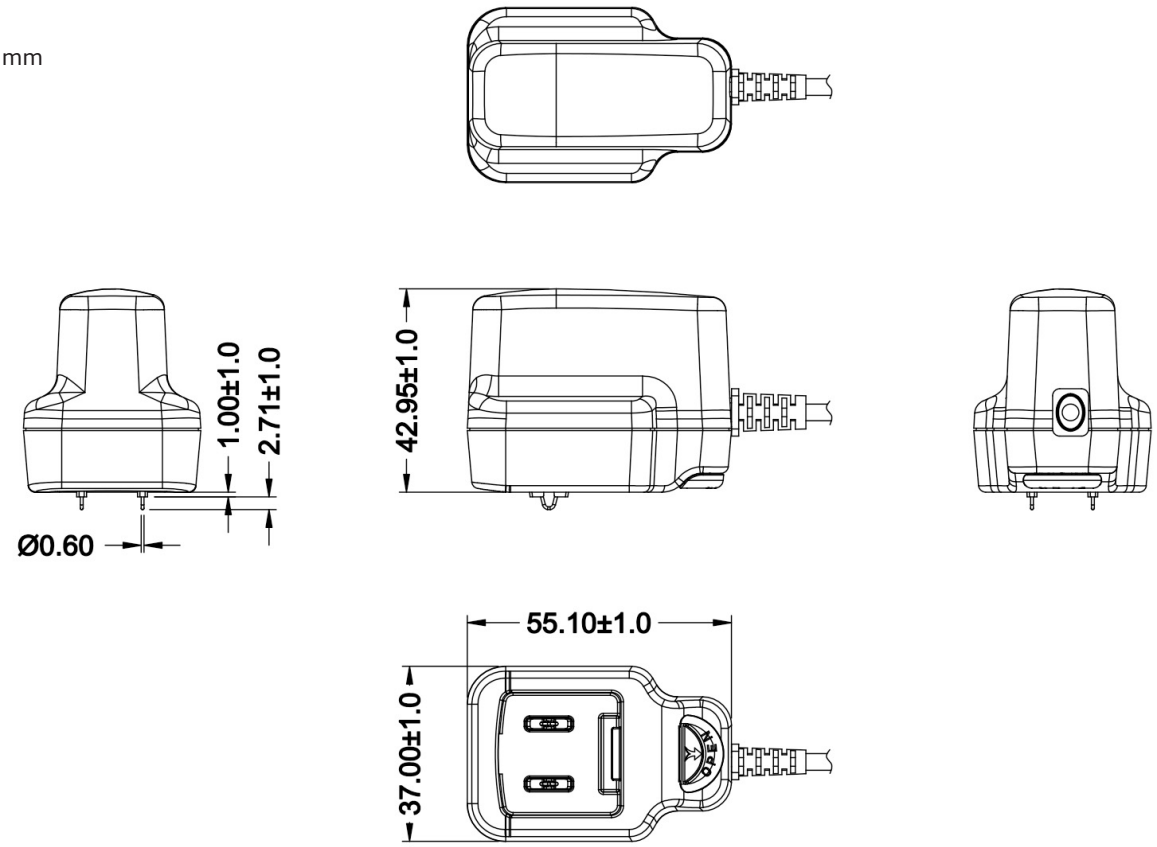
parameter	conditions/description	min	typ	max	units
operating temperature		0		50	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	10		90	%
storage humidity	non-condensing	10		90	%

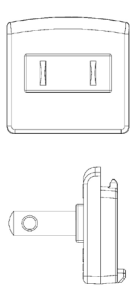
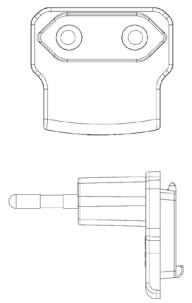
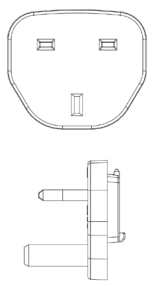
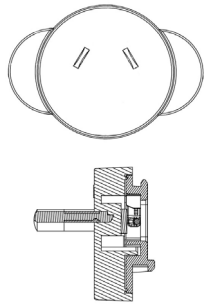
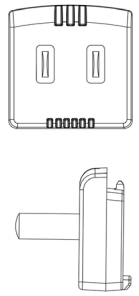
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	55.1 x 37 x 42.95				mm
inlet plug	interchangeable blades (NA, EU, UK, AU, CN)				
ac blade clip type	hidden clip				
weight				60	g

MECHANICAL DRAWING

units: mm
tolerance: ±1 mm



INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	United Kingdom	Australia	China
BLADE ACCESSORY	SMI-US-9	SMI-EU-9	SMI-UK-9	SMI-AU-9	SMI-CN-9
BLADE					

DC CORD

units: mm

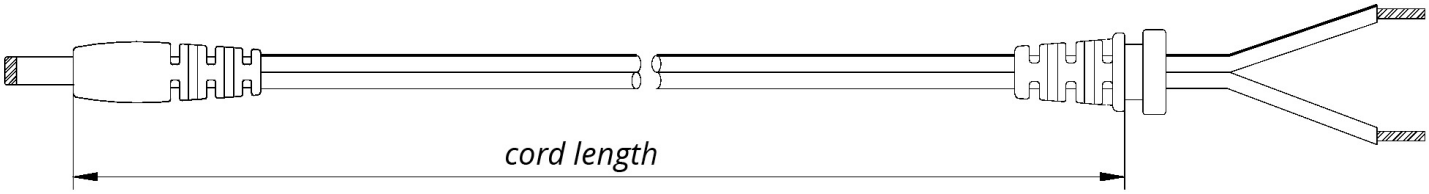


Table 1

MODEL NO.	CABLE	CORD LENGTH
SMI6D-5	UL2468, 24 AWG	1,500 mm ±80
SMI6D-5B	UL2468, 22 AWG	1,500 mm ±80
SMI6D-5.9	UL2468, 24 AWG	1,500 mm ±80
SMI6D-7.5	UL2468, 22 AWG	1,500 mm ±80
SMI6D-9	UL2468, 24 AWG	1,500 mm ±80
SMI6D-12	UL2468, 24 AWG	1,500 mm ±80

Note: The AWG may vary based on the specific DC connector used.

DC PLUG TYPE PART NUMBER KEY

X X X

Plug Polarity:
P = Center Positive



N = Center Negative



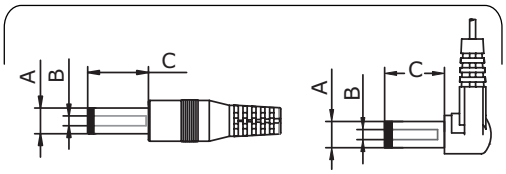
Plug Code:
X = Choose a code from the options below

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
•	•	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

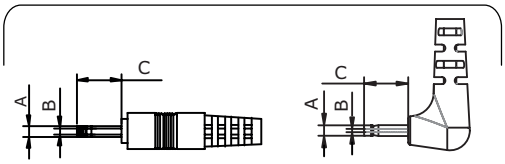
Note: 1. Tip positive
2. Maximum insertion depth is 10mm
3. Contact BEL for additional plug options

Standard



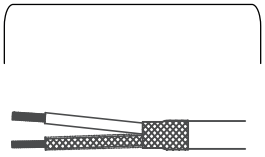
Straight Right Angle (R)

EIAJ

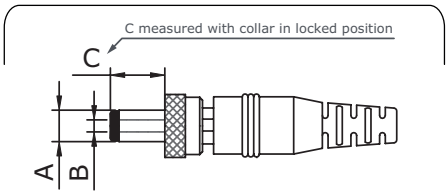


Straight Right Angle (R)

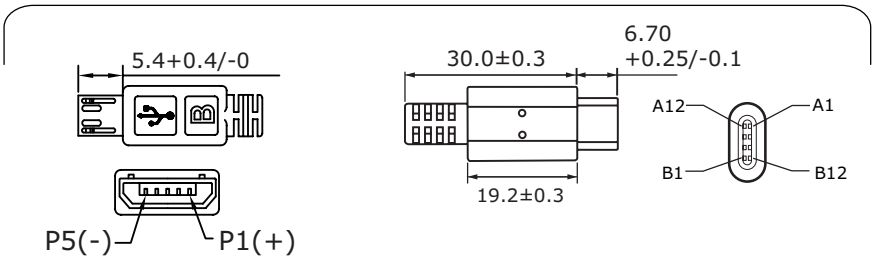
Stripped & Tinned



Locking



USB



Micro USB Type B Type C

REVISION HISTORY

rev.	description	date
1.0	initial release	01/04/2026

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

CUI INC
a bel group

15575 SW Sequoia Pkwy #100
Portland, OR 97224
800.275.4899

Fax 503.612.2383
Belfuse.com
powersupport@belf.com

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.

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