

SERIES: SMI6 | DESCRIPTION: AC-DC POWER SUPPLY
FEATURES

- DoE Level VI, CoC Tier 2 efficiency
- up to 6 W power
- interchangeable AC blades
- universal input (90~264 Vac)
- single regulated output from 5~15 Vdc
- over voltage and short circuit protections
- UL/cUL, RCM, CCC, PSE safety approvals
- custom designs available



MODEL	output voltage	output current max	output power max	ripple and noise ¹ max	efficiency level ²
	(Vdc)	(A)	(W)	(mVp-p)	
SMI6-5	5	1.2	6	150	VI
SMI6-5.95	5.95	1	6	150	VI
SMI6-9	9	0.67	6	150	VI
SMI6-12	12	0.5	6	200	VI
SMI6-15	15	0.4	6	200	VI

Notes: 1. At full load, 100-240 Vac input, 20 MHz bandwidth oscilloscope, output terminated with 0.1 μ F ceramic and 10 μ F electrolytic capacitors.
 2. CoC Tier 2 compliant

PART NUMBER KEY
SMI6 - XX - X - XXX - CXX

Base Number

Output Voltage

Blades:

V = North America, Europe, United Kingdom, Australia, and China blade 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

DC Plug Type:

XXX = See output plug options
on page 4 for more details

ST = Stripped and Tinned

Reserved for Custom
Configurations

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.3	A
leakage current				0.25	mA
no load power consumption				0.075	W

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±1		%
load regulation	5 Vdc output model all other models		±6 ±5		% %

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage 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 4,242		Vac Vdc
isolation resistance	input to output at 500 Vdc	100			MΩ
safety approvals	UL/cUL, RCM, CCC, PSE				
EMI/EMC	FCC Part 15B Class B				
RoHS	yes				

ENVIRONMENTAL

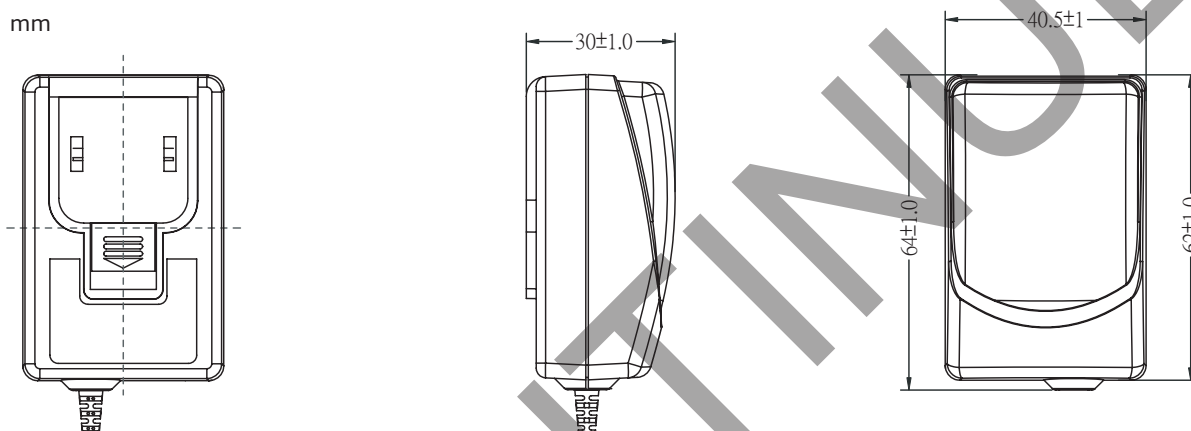
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-10		70	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

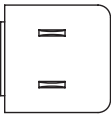
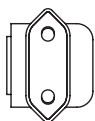
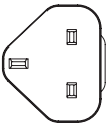
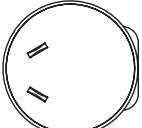
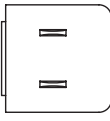
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	64 x 40.5 x 30				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia, China)				
weight	5.95 Vdc model (without interchangeable blades)		69		g
	all other models (without interchangeable blades)		68.5		g

MECHANICAL DRAWING

units: mm

tolerance: ± 1 mm

INTERCHANGEABLE BLADES					
BLADE DESIGNATOR	N	E	B	A	C
REGION	North America	Europe	UK	Australia	China
BLADE ACCESSORY	SMI-US-1	SMI-EU-1	SMI-UK-1	SMI-AU-1	SMI-CN-1
BLADE					

DC CORD

units: mm

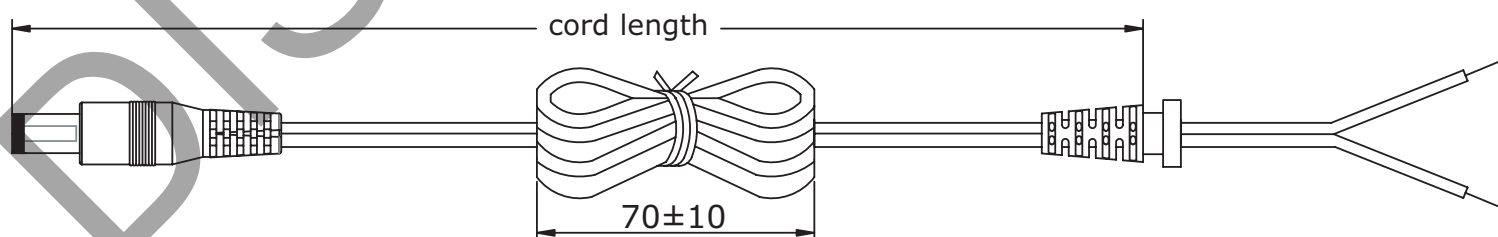
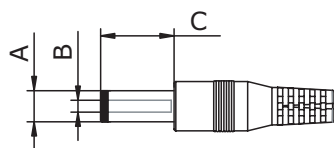


Table 1

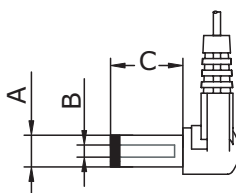
MODEL NO.	CABLE	CORD LENGTH
SMI6-5	UL2468, 20 AWG	1,530 mm ± 100
SMI6-5.95	UL2468, 20 AWG	1,530 mm ± 100
SMI6-9	UL2468, 22 AWG	1,530 mm ± 100
SMI6-12	UL2468, 22 AWG	1,530 mm ± 100
SMI6-15	UL2468, 22 AWG	1,530 mm ± 100

OUTPUT PLUG OPTIONS

Standard DC Plug



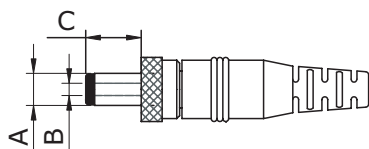
Straight Plug



Right Angle Plug

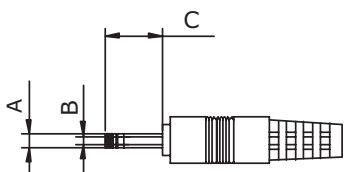
Size	A	B	C	Unit
5	5.5	2.1	9.5	mm
6	5.5	2.5	9.5	mm
7	3.5	1.35	9.5	mm
8	3.8	1.35	9.5	mm
9	3.8	1.05	9.5	mm

Locking DC Plug

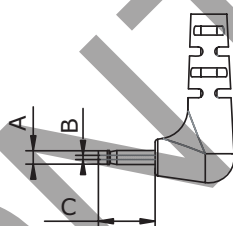


Size	A	B	C	Unit
10	5.5	2.1	9.5	mm
11	5.5	2.5	9.5	mm

EIAJ DC Plug



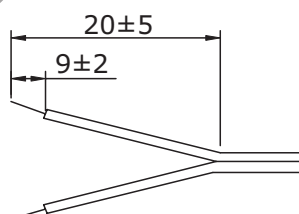
Straight Plug



Right Angle Plug

Size	EIAJ	A	B	C	Unit
12	EIAJ-1	2.35	0.7	9.5	mm
13	EIAJ-2	4.0	1.7	9.5	mm
14	EIAJ-3	4.75	1.7	9.5	mm

Stripped and Tinned

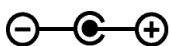


DC Plug Type

Plug Polarity:

P = Center Positive

N = Center Negative



XXX

Plug Size:

X = See above plug options

Plug Angle:

"blank" = Straight
R = Right Angle

*Contact CUI for additional plug options

REVISION HISTORY

rev.	description	date
1.0	initial release	07/01/2015
1.01	updated datasheet	02/08/2016
1.02	updated datasheet	09/14/2016
1.03	Australia blade housing changed, and blade orientation rotated 90 degrees	10/02/2018
1.04	company logo updated	09/30/2020
1.05	safeties updated	12/11/2020

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.

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