# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# 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, GS, RCM, CCC, PSE safety approvals
- custom designs available

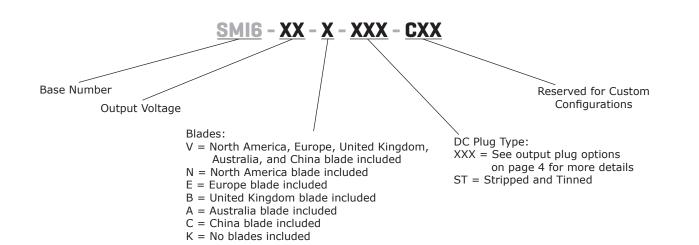




MODEL	output voltage	output current	output power	ripple and noise <sup>1</sup>	efficiency level <sup>2</sup>
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	
SMI6-5	5	1.2	6	150	VI
SMI6-5.95	5.95	1	6	150	VI
SMI6-9	9	0.67	6	150	VI
SMI6-12	12	0.5	6	200	VI
SMI6-15	15	0.4	6	200	VI

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

#### **PART NUMBER KEY**



CUI Inc | SERIES: SMI6 | DESCRIPTION: AC-DC POWER SUPPLY

#### INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.3	А
leakage current				0.25	mA
no load power consumption	Level VI CoC Tier 2			0.1 0.075	W W

#### OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±1		%
load regulation	5 Vdc output model		±6		%
	all other models		±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	ge 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, GS, RCM, CCC, PSE				
EMI/EMC	FCC Part 15B Class B, CE				
RoHS	2011/65/EU				

#### **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	%

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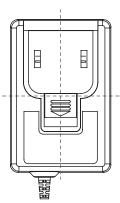
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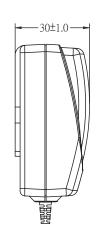
# **MECHANICAL**

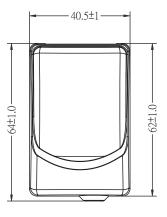
parameter	conditions/description	min	typ	max	units	
dimensions	64 x 40.5 x 30				mm	
inlet plug	interchangeable blades (North America, Europe, UK, Au	interchangeable blades (North America, Europe, UK, Australia, China)				
weight	5.95 Vdc model (without interchangeable blades) all other models (without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

# **MECHANICAL DRAWING**

units: mm tolerance: ±1 mm







	INTERCHANGEABLE BLADES								
BLADE DESIGNATOR	Ν	Е	В	А	С				
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

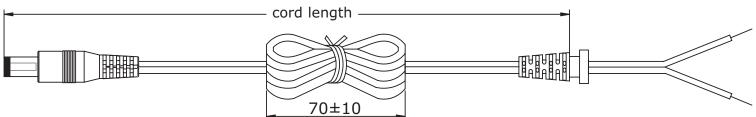
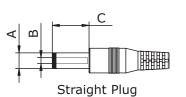


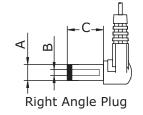
Table 1

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**

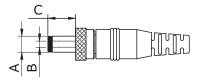
## **Standard DC Plug**





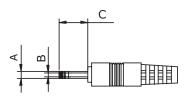
5	Size	А	В	С	Unit
	5	5.5	2.1	9.5	mm
	6	5.5	2.5	9.5	mm
	7	3.5	1.35	9.5	mm
	8	3.8	1.35	9.5	mm
	9	3.8	1.05	9.5	mm

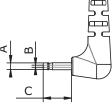
# **Locking DC Plug**



Size	А	В	С	Unit
10	5.5	2.1	9.5	mm
11	5.5	2.5	9.5	mm

### **EIAJ DC Plug**



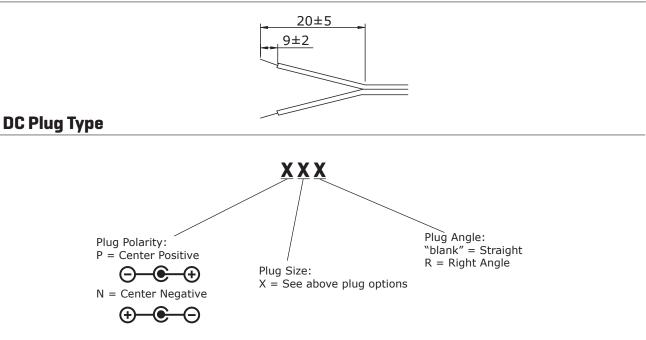


Size	EIAJ	А	В	С	Unit
12	EIAJ-1	2.35	0.7	9.5	mm
13	EIAJ-2	4.0	1.7	9.5	mm
14	EIAJ-3	4.75	1.7	9.5	mm

Straight Plug

Right Angle Plug

#### **Stripped and Tinned**



\*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

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.

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.