



**SERIES:** SMI6B | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

- DoE Level VI, CoC Tier 2 efficiency
- up to 6 W power
- compact design
- 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
- certified to 62368-1
- 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)	max (mVp-p)	
SMI6B-5	5	1.2	6	300	VI
SMI6B-6	6	1.0	6	300	VI
SMI6B-9	9	0.66	5.94	300	VI
SMI6B-12	12	0.5	6	300	VI
SMI6B-15	15	0.4	6	300	VI

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

**PART NUMBER KEY**



## INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current				0.2	A
leakage current	at nominal AC input and frequency			0.25	mA
no load power consumption	at 115/ 230 Vac, 60/50 Hz			0.075	W

## OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±5		%
load regulation			±5		%
start-up time	at 115 Vac input			3	s
rise time	at 90~264 Vac input			100	ms
hold-up time	at nominal input	5			ms

## PROTECTIONS

parameter	conditions/description	min	typ	max	units
over current protection	output shut down, auto recovery				
	5 Vdc output models			1.8	A
	6 Vdc output models			1.6	A
	9, 12 Vdc output models			1.0	A
	15 Vdc output models			0.8	A
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
safety approvals	UL/cUL, GS, RCM, CCC, PSE				
EMI/EMC	FCC Part 15B Class B, CE				
MTBF	as per Telcordia SR-332, Issue 2 at 115/230 Vac, full load, 0~40°C	50,000			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		85	%
storage humidity	non-condensing	5		95	%

## MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	47 x 34.5 x 26.5				mm
inlet plug	interchangeable blades (North America, Europe, UK, Australia, China)				
weight	5 Vdc output models (without interchangeable blades)		54		g
	all other models (without interchangeable blades)		50		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-3	SMI-EU-3	SMI-UK-3	SMI-AU-3	SMI-CN-3
BLADE					

## DC CORD

units: mm



**Table 1**

MODEL NO.	CABLE	CORD LENGTH
SMI6B-5	UL2468, 22 AWG	1,530 mm ±50
SMI6B-6	UL2468, 22 AWG	1,530 mm ±50
SMI6B-9	UL2468, 24 AWG	1,530 mm ±50
SMI6B-12	UL2468, 24 AWG	1,530 mm ±50
SMI6B-15	UL2468, 24 AWG	1,530 mm ±50

## DC PLUG TYPE PART NUMBER KEY

**XXX**

**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	Type	Dimensions (mm)			Plug Angle	
Center Pos.	Center Neg.			Option	A	B	C	Straight
•	•	5	Standard	5.5	2.1	9.5	•	•
•	•	6	Standard	5.5	2.5	9.5	•	•
•	•	7	Standard	3.5	1.35	9.5	•	•
•	•	10	Locking	5.5	2.1	9.5	•	N/A
•	•	11	Locking	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	CUB	USB	USB Type C			•	N/A
N/A	N/A	MUB	USB	Micro USB Type B			•	N/A

Note: 1. Contact CUI for additional plug options

### Standard



### EIAJ



### Locking



### USB



## REVISION HISTORY

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rev.	description	date
1.0	initial release	06/04/2019

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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