


**SERIES:** EP5A 5W USB | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

- 5 W power
- universal input (90~264 Vac)
- single regulated 5 V output
- over voltage, over current, and short circuit protections
- UL/cUL, PSE safety approvals
- level V efficiency



MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise <sup>1</sup> max (mVp-p)	efficiency level
EP5A050100U	5	1	5	350	V

Notes: 1. At full load, 20 MHz bandwidth oscilloscope, each output terminated with 10  $\mu$ F aluminum electrolytic and 0.1  $\mu$ F ceramic capacitors.

**PART NUMBER KEY**

**EP5A050100U - I38 - EJ - CXX**

Base Number  
example of 5 Vdc, 1 A

USB Type A inlet

Factory  
Designation

Reserved for Custom  
Configurations

## INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at full load			0.15	A
leakage current				0.25	mA

## OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation			±5		%
load regulation	from +20% to +80% load		±10		%
start-up				2	s
hold-up	at 115 Vac/50 Hz, 80% max. load	10			ms

## PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output shut down				
over current protection	automatic power decrease, auto recovery			200	%
short circuit protection	output terminal protected				

## SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 2 seconds	3,000			Vac
isolation resistance	input to output at 500 Vdc	10			MΩ
safety approvals	UL/cUL, PSE, LPS				
EMI/EMC	FCC Part 15B Class B, CISPR22 EN55022 class B				
MTBF	as per Telcordia SR-332 at full load, 25°C	300,000			hrs
RoHS compliant	yes				

## ENVIRONMENTAL

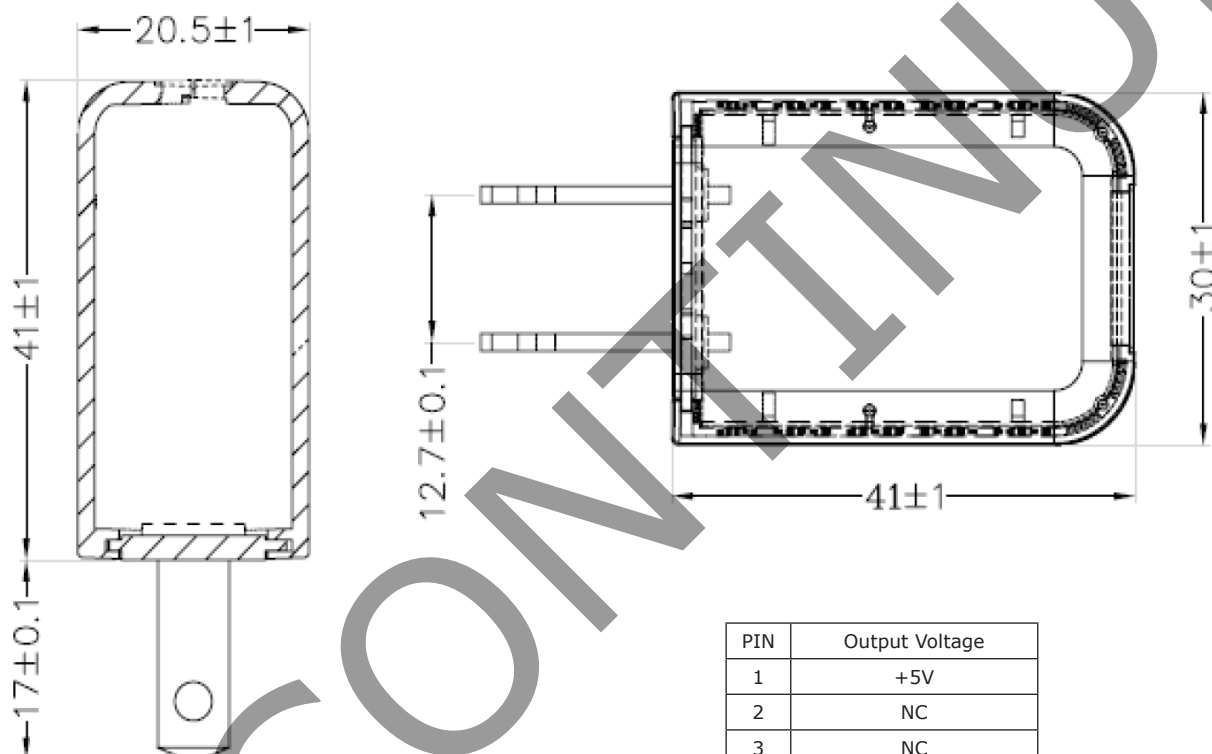
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-25		85	°C
operating humidity		10		95	%
storage humidity		10		95	%

## MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	41 x 30 x 20.5				mm
input plug	US 2-pin				

## MECHANICAL DRAWING

units: mm  
tolerance:  $\pm 1$



PIN	Output Voltage
1	+5V
2	NC
3	NC
4	GND

+5	1
GND	4

## REVISION HISTORY

rev.	description	date
1.0	initial release	08/20/2013

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.