

**SERIES:** EPS 6W | **DESCRIPTION:** AC-DC POWER SUPPLY

**FEATURES**

- up to 6 W power
- compact size
- single output from 3~24 V
- over voltage and short circuit protections
- custom designs available



MODEL	output voltage	output current max	output power max	ripple and noise <sup>1</sup> max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
EPS030100	3	1	3	100	IV
EPS033100	3.3	1	3.3	100	IV
EPS045100	4.5	1	4.5	100	V
EPS050100	5	1	5	100	V
EPS060100	6	1	6	100	V
EPS075080	7.5	0.8	6	100	IV
EPS090066	9	0.66	6	100	V
EPS120050	12	0.5	6	120	V
EPS150040	15	0.4	6	150	V
EPS180033	18	0.33	6	180	V
EPS240025	24	0.25	6	240	IV

Notes: 1. At full load, 100 ~ 132 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with 10  $\mu$ F aluminum electrolytic and 0.1  $\mu$ F ceramic capacitors.

**PART NUMBER KEY**

**EPS030100 - PXXXX - CXX**

Base Number  
example of 3 Vdc, 1 A

DC Plug Type

Reserved for Custom  
Configurations

**INPUT**

parameter	conditions/description	min	typ	max	units
voltage		100		132	Vac
frequency		47		63	Hz
current				0.15	A
inrush current <sup>1</sup>	15V, 18V and 24V model	at 100 Vac		15	A
		at 132 Vac		30	A
	all other models	at 132 Vac		40	A
no load power consumption	level IV models			0.5	W
	level V models			0.3	W

Notes: 1. inrush lasts no longer than 0.5 ms before settling to steady state current

**OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation	all other models		±1		%
	7.5V model		±2		%
load regulation			±5		%
temperature coefficient	0 ~ 40°C, full load, after initial 1 hour warm-up		±0.02		%/°C
start-up	time needed to reach regulation			3	s
hold-up	at 115 Vac, full load	10			ms

**PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	clamped by internal protection zener				
short circuit protection	continuous, auto-recovery upon removal of short				

**SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output at 10 mA for 1 minute			3,000	Vdc
				4,242	Vdc
isolation resistance	input to output at 500 Vdc	100			MΩ
safety approvals	UL 1310				
safety	class II				
EMI/EMC	FCC Part 15 Class B				
leakage current				0.25	mA
RoHS compliant	yes				

**ENVIRONMENTAL**

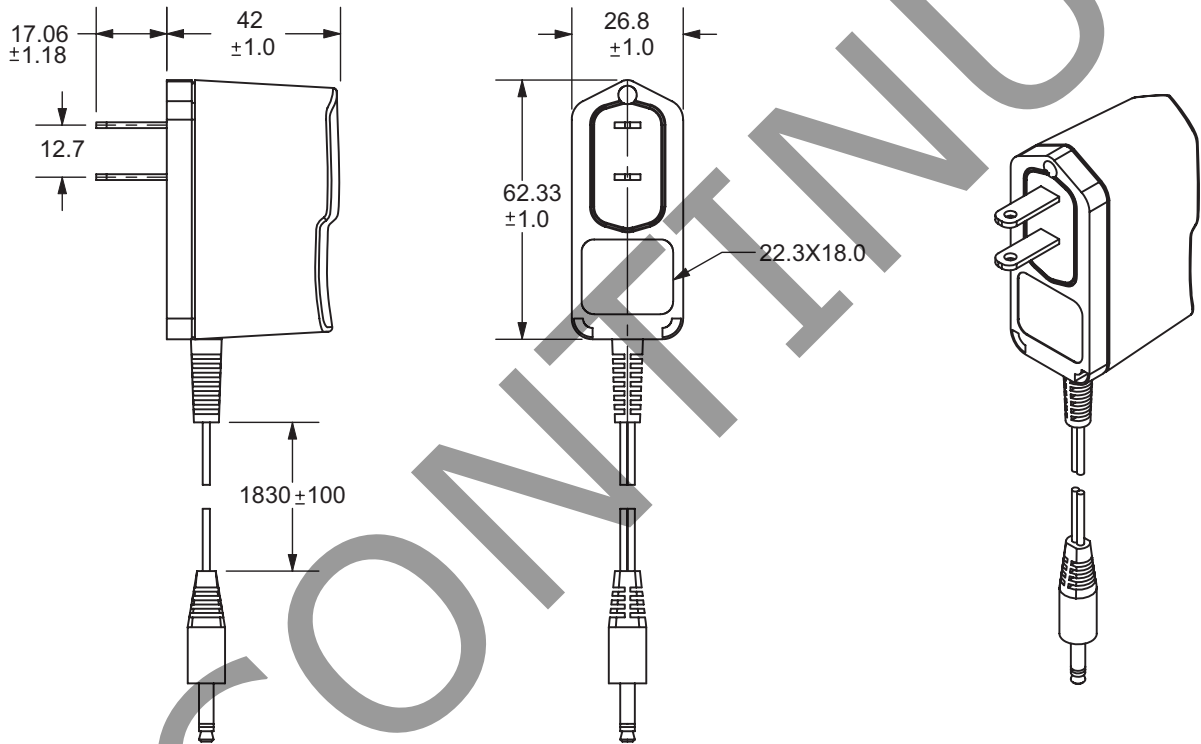
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-10		70	°C
operating humidity		20		80	%
storage humidity		10		90	%

## MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	62.33 x 26.8 x 42 (2.454 x 1.055 x 1.654 inch)				mm
input plug	fixed US				

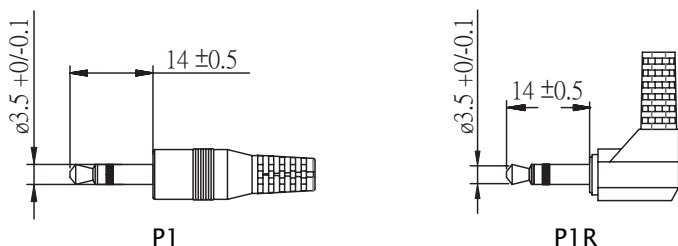
## MECHANICAL DRAWING

units: mm  
 tolerance: X.X ±0.5  
 X.XX ±0.03

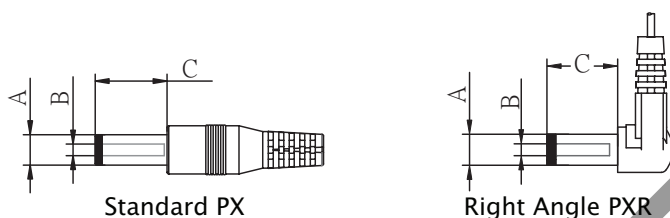


## OUTPUT PLUG OPTIONS

### 3.5 mm Phono Plug



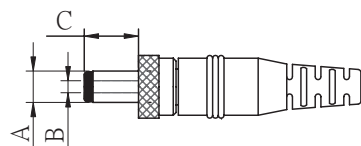
### Standard DC Plug



	A	B	C	Unit
P5/P5R	5.5	2.1	12 <sup>1</sup>	mm
P6/P6R	5.5	2.5	12	mm
P7/P7R	3.5	1.35	9.5	mm
P8/P8R	3.8	1.35	9.5	mm
P9/P9R	3.8	1.05	9.5	mm

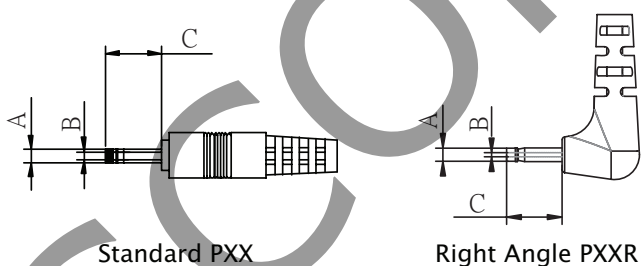
Notes: 1. EPS050100-P5P has a 9.5mm dc plug length

### Locking DC Plug

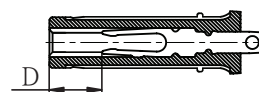


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

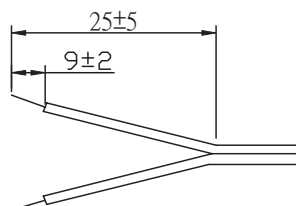
### EIAJ Plugs



	EIAJ	A	B	C	D	Unit
P12/P12R	EIAJ-1	2.35	0.7	9.5	NA	mm
P13/P13R	EIAJ-2	4.0	1.7	9.5	5.0	mm
P14/P14R	EIAJ-3	4.75	1.7	9.5	5.0	mm



### Stripped and Tinned



### DC PLUG TYPE

**ST**  
|  
stripped and tinned

**PXX X X**

Plug type

Plug angle:  
"blank" = standard  
R = right angle

Plug polarity:  
"blank" = N/A  
P = center positive   
N = center negative

## REVISION HISTORY

rev.	description	date
1.0	initial release	06/29/2006
1.01	applied new spec template	12/28/2010
1.02	removed multiple models, applied new spec template	05/26/2011
1.03	updated P7/P7R B dimension	04/13/2012
1.04	V-Infinity branding removed, safety and EMI/EMC data updated	08/16/2012
1.05	added 7.5V model	09/24/2012
1.06	updated P5 & P6 plug lengths	04/18/2013

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.

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