CUI INC®

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 (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
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 µF aluminum electrolytic and 0.1 µF ceramic capacitors.

PART NUMBER KEY

EPS030100 - PXXXX - CXX

- EPS030100 — Base Number (example of 3 Vdc, 1 A)
- PXXXX — DC Plug Type
- CXX — 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[1]	15V, 18V and 24V model	at 100 Vac at 132 Vac			15 30	A A
	all other models	at 132 Vac			40	A
no load power consumption	level IV models level V models				0.5 0.3	W 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 7.5V model		±1 ±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 4,242	Vdc 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

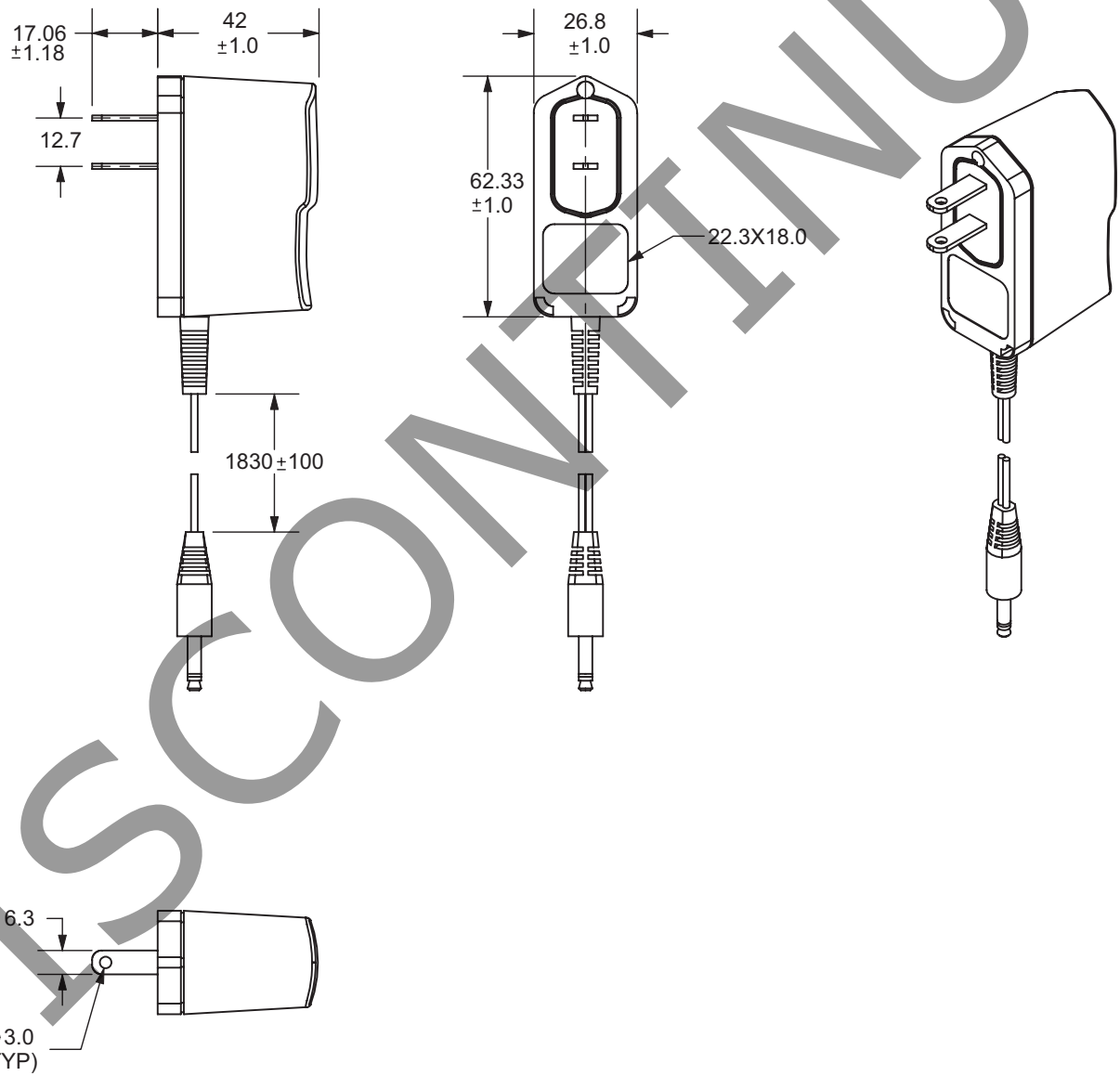
parameter	conditions/description	min	typ	max	units
operating temperature		0		40	°C
storage temperature		-10		70	°C
operating humidity		20		80	%
storage humidity		10		90	%

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				

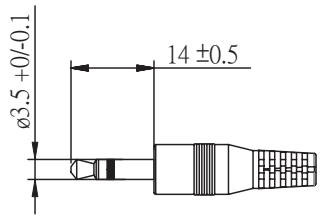
MECHANICAL DRAWING

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

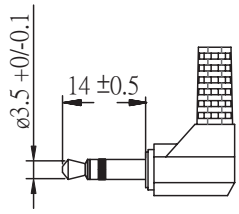


OUTPUT PLUG OPTIONS

3.5 mm Phono Plug

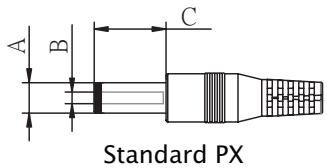


P1

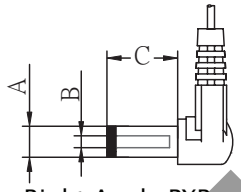


P1R

Standard DC Plug



Standard PX

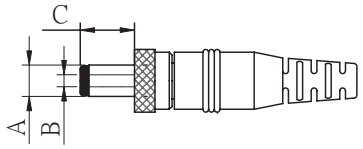


Right Angle PXR

	A	B	C	Unit
P5/P5R	5.5	2.1	12[1]	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

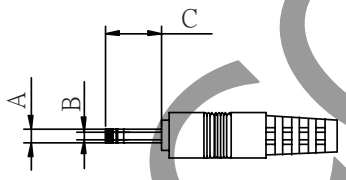
Notes: 1. EPS050100-P5P has a 9.5mm dc plug length

Locking DC Plug

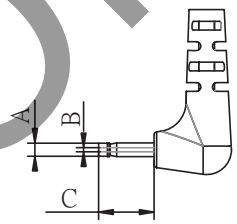


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

EIAJ Plugs

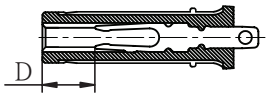


Standard PXX

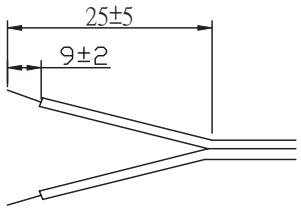


Right Angle PXXR

	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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