SERIES: EPSA 20W | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

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



DISCONTINUED

MODEL	output voltage (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency level
EPSA050400U	5	4	20	50	V

Notes: 1. At full load, ≥100 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with 10 µF aluminum electrolytic and 0.1 µF ceramic capacitors.

PART NUMBER KEY

EPSA050400U - XX - EJ - CXX

- EPSA050400U: Base Number (example of 5 Vdc, 4 A)
- XX: DC Plug Type
- EJ: Factory Designation
- CXX: Reserved for Custom Configurations

Please read our datasheet & drawing disclaimer here.

INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at full load			0.5	A
inrush current	at 115 Vac, full load, 25°C, cold start			30	A
leakage current				0.25	mA
input fuse	2A/250V				

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 110 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, LPS				
EMI/EMC	FCC Part 15B Class B				
MTBF	as per Telcordia SR-332, Issue 2 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	%

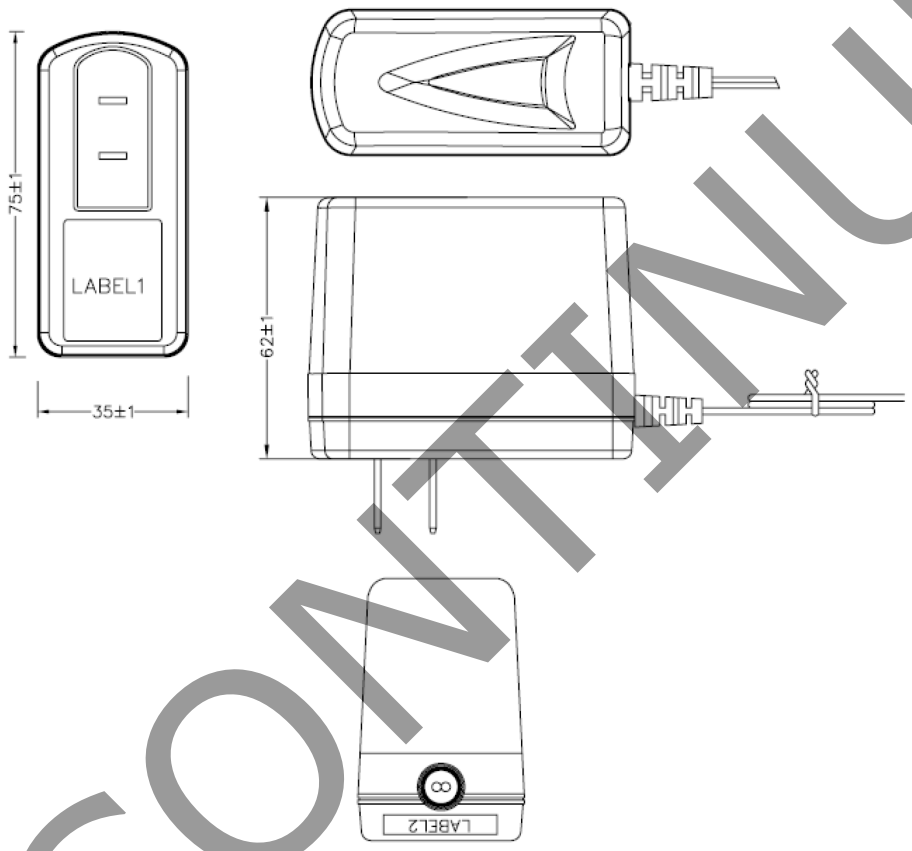
DISCONTINUED

MECHANICAL

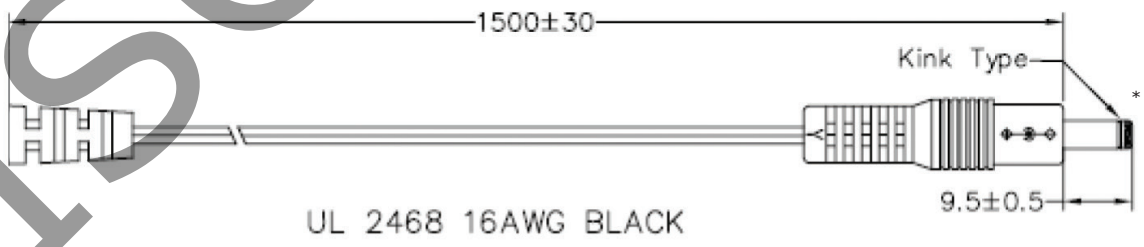
parameter	conditions/description	min	typ	max	units
dimensions	75 x 35 x 62				mm
input plug	fixed US				

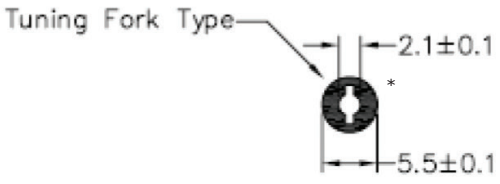
MECHANICAL DRAWING

units: mm
tolerance: ±1



DC CORD





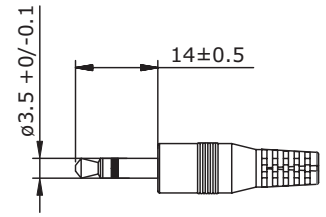
MODEL NO.	CABLE GAUGE	CORD LENGTH
EPSA050400U	16 AWG	1,500 mm ±30

*Standard "P5P" plug shown

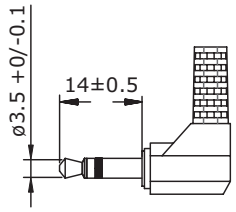
DISCONTINUED

OUTPUT PLUG OPTIONS

3.5 mm Phono Plug



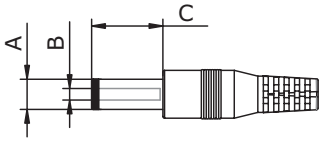
P1



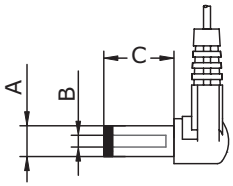
P1R

*Tip positive

Standard DC Plug



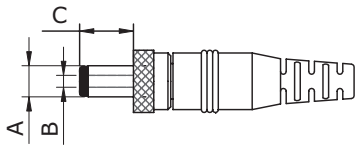
Standard PX



Right Angle PXR

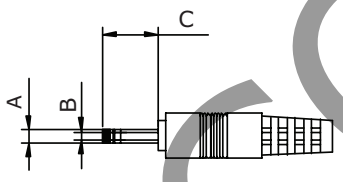
	A	B	C	Unit
P5/P5R	5.5	2.1	9.5	mm
P6/P6R	5.5	2.5	9.5	mm
P7/P7R	3.5	1.35	9.5	mm
P8/P8R	3.8	1.35	9.5	mm
P9/P9R	3.8	1.05	9.5	mm

Locking DC Plug

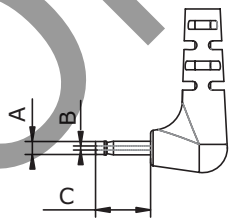


	A	B	C	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

EIAJ Plugs

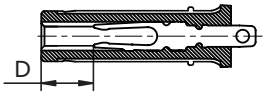


Standard PXX

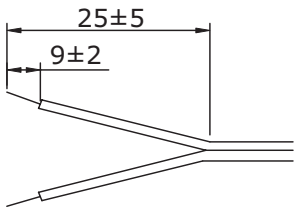


Right Angle PXXR

	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

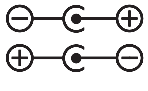
Stripped and Tinned

PXX X X

Plug Type

Plug Angle:
"Blank" = Standard
R = Right Angle

Plug Polarity:
"Blank" = N/A
P = Center Positive
N = Center Negative



*Contact CUI for additional output plug options.

DISCONTINUED

REVISION HISTORY

rev.	description	date
1.0	initial release	06/14/2013

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.

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