

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









11/14/2014

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#### **DESCRIPTION:** AC-DC POWER SUPPLY SERIES: ETSA 12W UD |

#### **FEATURES**

- 12 W power
- compact size
- universal input (90~264 Vac)
- single regulated output from 5~24 V
- over voltage and short circuit protection
- UL/cUL and GS safety approvals
- level V efficiency
- custom designs available







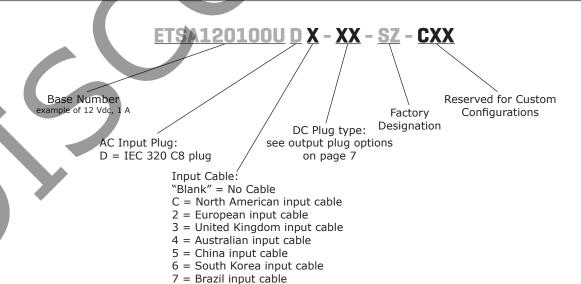




MODEL	output voltage	output current	output power	ripple and noise¹	efficiency level
	(Vdc)	max (A)	max (W)	<b>max</b> (mVp-p)	
ETSA050200UD	5	2	10	150	V
ETSA060200UD	6	2	12	150	V
ETSA090133UD	9	1.33	12	150	V
ETSA120100UD	12	1	12	150	V
ETSA150080UD	15	0.8	12	150	V
ETSA180066UD	18	0.66	12	150	V
ETSA240050UD	24	0.5	12	150	V

1. At full load, 100 ~ 240 Vac input, 20 MHz bandwidth oscilloscope, each output terminated with 10 µF aluminum electrolytic and 0.1 µF ceramic capacitors.

#### **PART NUMBER KEY**



8 = South Africa input cable 9 = Japan input cable

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### **INPUT**

parameter	conditions/description	min	typ	max	units
voltage		85		264	Vac
frequency		47		63	Hz
current				0.3	А
inrush current	115 Vac, cold start 230 Vac, cold start			30 60	A
leakage current				0.25	mA
no load power consumpti	ion			0.3	W

### **OUTPUT**

parameter	conditions/description	min typ	max units
line regulation	5V model all other models	±1 ±5	%
load regulation		±5	%

#### **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	output voltage clamped by internal protection zener				
short circuit protection	output shut down and auto restart				

### **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
isolation resistance	input to output at 500 V dc	100			MΩ
safety approvals	UL 60950-1, EN 60950-1/IEC 60950-1				
EMI/EMC	FCC class B, CE, VCCI, EN 61204-3, EN 55022, 6, 8, 11), CE	EN 55024 EN 610	00-3-(2, 3),	IEC 61000-4-	(2, 3, 4, 5,
RoHS	2011/65/EU				

### **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	%

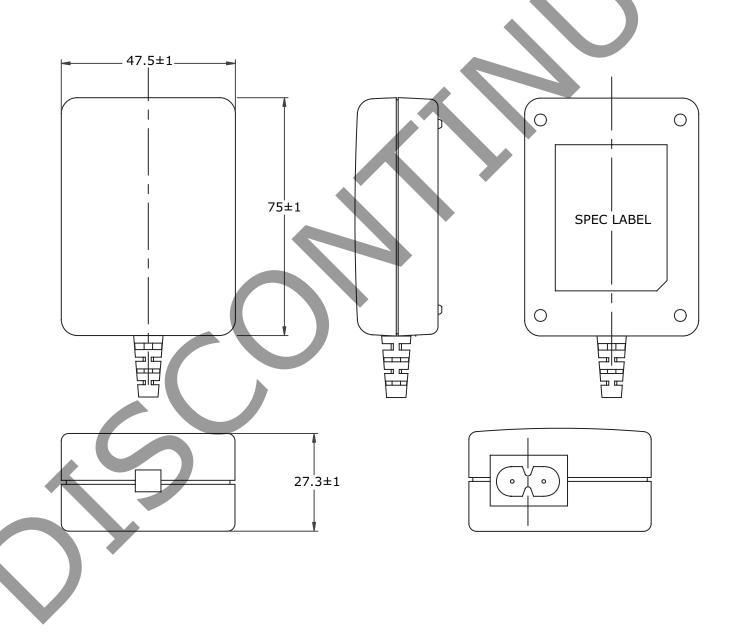
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### **MECHANICAL**

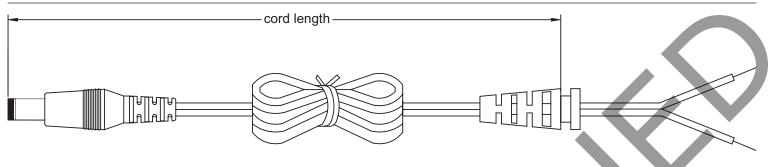
parameter	conditions/description	min	typ	max	units
dimensions	2.953 x 1.870 x 1.075 (75 x 47.5 x 27.3 mm)				inch
input plug	IEC320 / C8				

### **MECHANICAL DRAWING**

units: mm tolerance: ±1mm



### **DC CORD**



MODEL NO.	CABLE GAUGE
ETSA050200UD	20 AWG
ETSA060200UD	18 AWG
ETSA090133UD	20 AWG
ETSA120100UD	22 AWG
ETSA150080UD	22 AWG
ETSA180066UD	24 AWG
ETSA240050UD	24 AWG

### **AC CORD**

#### **NORTH AMERICAN INPUT CABLE**

units: mm

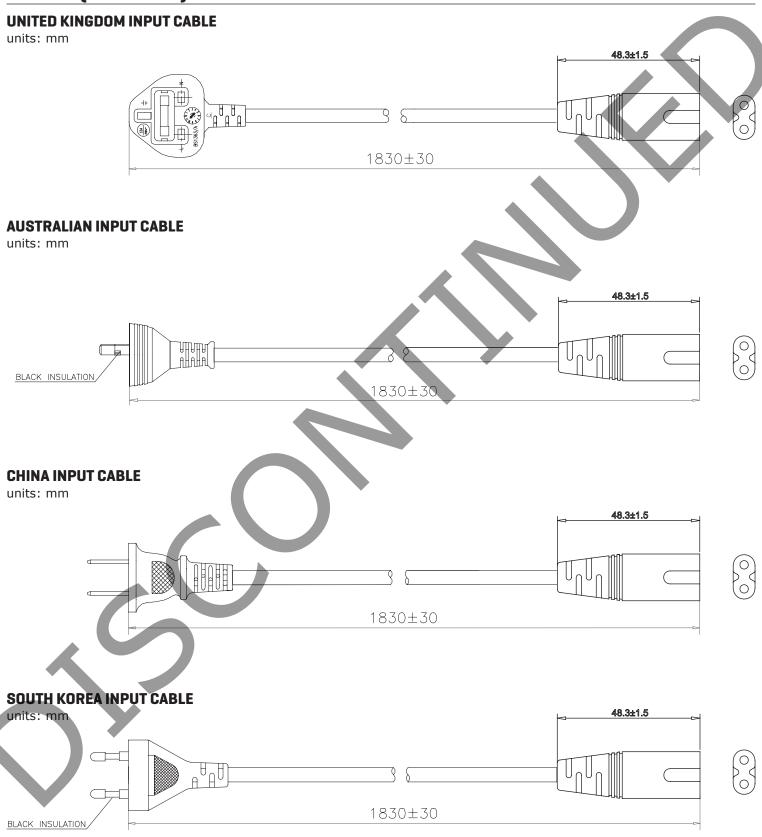


### **EUROPEAN INPUT CABLE**

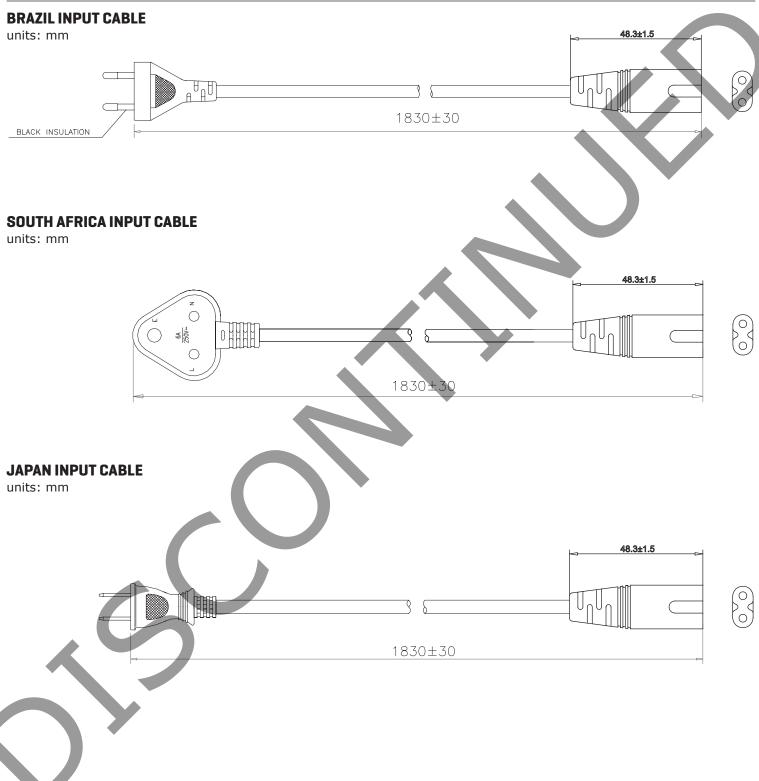
units: mm



# AC CORD (CONTINUED)

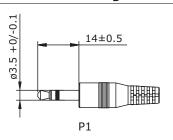


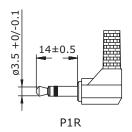
## **AC CORD (CONTINUED)**



### **OUTPUT PLUG OPTIONS**

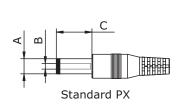
#### 3.5 mm Phono Plug

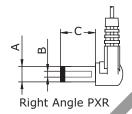




\*Tip positive

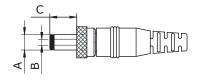
#### **Standard DC Plug**





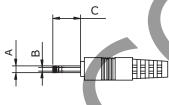
	А	В	C	Unit
P5/P5R	5.5	2.1	9.5	mm
P6/P6R	5.5	2.5	9.5	mm
<b>P7</b> /P7R	3.5	1.35	9.5	mm
P8/P8R	3.8	1.35	9.5	mm
P9/P9R	3.8	1.05	9.5	mm

### **Locking DC Plug**



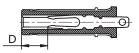
	А	В	С	Unit
P10	5.5	2.1	9.5	mm
P11	5.5	2.5	9.5	mm

#### **EIAJ Plugs**

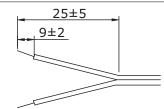




	EIAJ	Α	В	С	D	Unit
P12/P12R	EIAJ-1	2.35	0.7	9.5	NA	mm
P13/P13R	EIAJ-2	4.0	1.7	9.5	5.0	mm
P14/P14R	EIAJ-3	4.75	1.7	9.5	5.0	mm



### **Stripped and Tinned**



### **DC PLUG TYPE**

Plug Type: PXX = See above plug options ST = Stripped and Tinned

Plug Angle: "blank" = Straight R = Right Angle

Plug Polarity: P = Center Positive

N = Center Negative

<sup>\*</sup>Contact CUI for additional plug options

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	01/25/2010
1.01	new template applied	12/22/2011
1.02	updated P7/P7R B dimension	04/06/2012
1.03	V-Infinity branding removed, safety and EMI/EMC data updated	08/21/2012
1.04	updated series/model numbers	11/20/2012
1.05	added ac cord options	11/14/2014

The revision history provided is for informational purposes only and is believed to be accurate.



Headquarters 20050 SW 112th Ave. Tualatin, OR 97062 800.275.4899

Fax 503.612.2383 cui.com techsupport@cui.com

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.