



All information contained herein applies only to the above listed part number. Other versions of this part number with electrical or mechanical variations are available. Contact CUI Inc. for further assistance. 9615 SW Allen Blvd., Ste. 103, Beaverton OR 97005  
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## 1.0 General Description

Model DTS120250UT is a universal switching-mode power supply, operating at

input voltage 90VAC to 264VAC and output voltage of 12VDC with 2.5A

DC load.

## 2.0 Electric Characteristics

### 2.1 Input

No	ITEM	SPECIFICATION
1.	Rated input Voltage	AC100V-240V
	Vibration input Voltage Range	AC90V-264V
2.	Frequency Rated	50-60Hz
	Frequency Vibration	47-63Hz
3.	Input Rated Current	800mA RMS Max
	Input min. Current	100mA Max
	Inrush Current	30A Max .at 115vac cool start
		50A Max. at 230vac cool start
4.	Input power	75VA Max
5.	Leakage current	0.25mA
6.	Efficiency	70% Min.



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## 2.2 Output:

No	ITEM	SPECIFICATION
1.	*output Voltage	+12VDC
2.	*output max. current	2.5A
3	output min. Current	0A
4.	Line regulation	± 1%
5	Load regulation	± 5%
6	Over voltage protection	14.2V to 15.8V ( output shut down)
7	Short circuit protection	Output shut down and auto restart
8	Ripple Noise	100-240V 120V(p-p) Max

## 3.0 HI-POT SPECIFICATION

3.1 Input to output : 3000VAC 10mA 1 minute.

4.0 Insulation resistance:

4.1 Input to output : 500vdc to test the input to output resistance not be less 100M ohm

5.0 Safety approved: UL,CUL,CE,GS

6.0 EMI standard : meet FCC class B , VCCI – II ,CE

7.0 Mechanical specification:



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### 7.1 AC Plug : IEC 320 3PIN

### 7.2 DC cord:

7.2.1 Bending test: Life 1000 times 100% guarantee. Swings 120 form

Left to right loading weight 500 gm , 40 cycle/minute.

7.2.2 Pull test : DC cord and plug ,weight 6kg for 1 minute.

### 7.3 Cord length and Output plug: See Reference (2)

7.4 Weight : 201 gm

7.5 Case Size:(L) 98 X (W) 50 X (H) 28mm

### 8.0 Normal operating temperature and humidity

8.1 Operating temperature : 0°C to 40°C.

8.2 Humidity : 20% to 80%.

### 9.0 Storage temperature and humidity:

9.1 Storage temperature : -10°C to 70°C.

9.2 Humidity : 10% to 90%.

SPEC NO: 296PS-275

PART NO: DTS120250UT



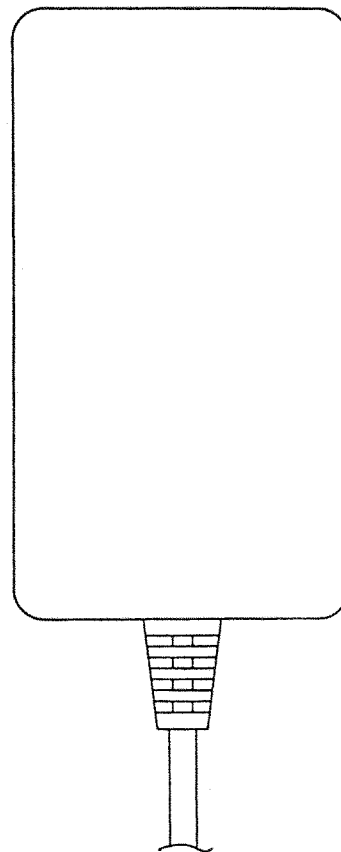
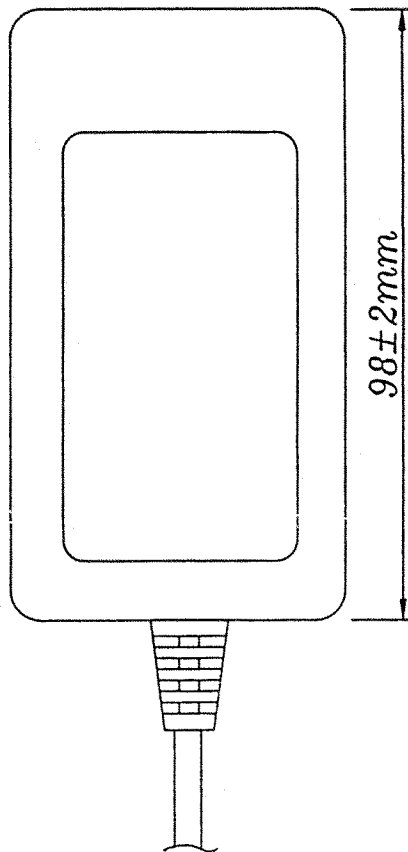
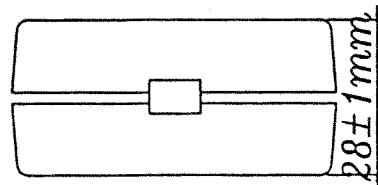
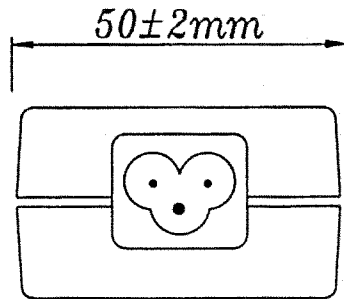
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UNIT: mm

DATE: 05/04/01

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TEST CONDITION	I/P	SPEC.	1	2	3	4	5	6
LINE REGULATION AT LOAD 2.5A OUTPUT VOLTAGE	90V	12VDC ±5%	11.78	11.77				
	115V		11.78	11.77				
	130V		11.78	11.77				
	190V		11.78	11.77				
	230V		11.78	11.77				
Ripple Noise (V p-p)	100V	120 mV	27	28				
	230V	Max.	27	25				

TEST CONDITION	I/P	SPEC.	1	2	3	4	5	6
LINE REGULATION AT LOAD 0A OUTPUT VOLTAGE	90V	12VDC ±5%	12.12	12.06				
	115V		12.12	12.06				
	130V		12.12	12.06				
	190V		12.12	12.06				
	230V		12.12	12.06				
Ripple Noise (V p-p)	100V	120 mV	3	3				
	230V	Max.	4	4				

INPUT CHARACTERISTICS:				
INPUT VOLTAGE	INPUT CURRENT	INPUT POWER	POWER FACTOR	EFFICIENCY
90V	0.68	37.5	0.61	78.4
115V	0.56	36.7	0.57	80.2
130V	0.51	36.4	0.54	80.2
180V	0.41	35.8	0.49	80.5
230V	0.36	36.6	0.44	80.3
260V	0.34	37.0	0.41	79.5

OUTPUT POWER PROTECTION:						
INPUT	90V	115V	132V	180V	230V	264V
RESULT	55.7	66.1	70.7	77.9	84.5	88.4

OVER CURRENT PROTECTION:						
INPUT	90V	115V	132V	180V	230V	264V
RESULT	4.9	8.1	6.7	7.3	7.9	8.5