



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 **DTS090330UT** is a universal switching-mode power supply, operating at

input voltage 90VAC to 264VAC and output voltage of 9VDC with 3.3A

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<br>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          | +9VDC                              |
| 2. | *output max. current     | 3.3A                               |
| 3  | output min. Current      | 0A                                 |
| 4. | Line regulation          | ± 1%                               |
| 5  | Load regulation          | ± 5%                               |
| 6  | Over voltage protection  | 11.4V to 12.6V ( output shut down) |
| 7  | Short circuit protection | Output shut down and auto restart  |
| 8  | Ripple Noise             | 100-240V 100mV(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 230 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-274

PART NO: DTS090330UT



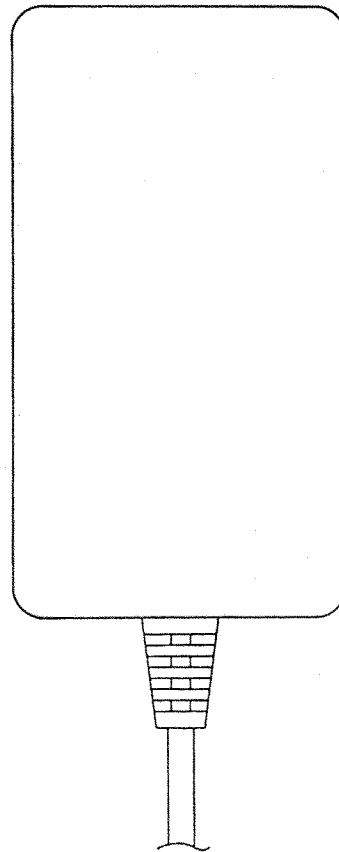
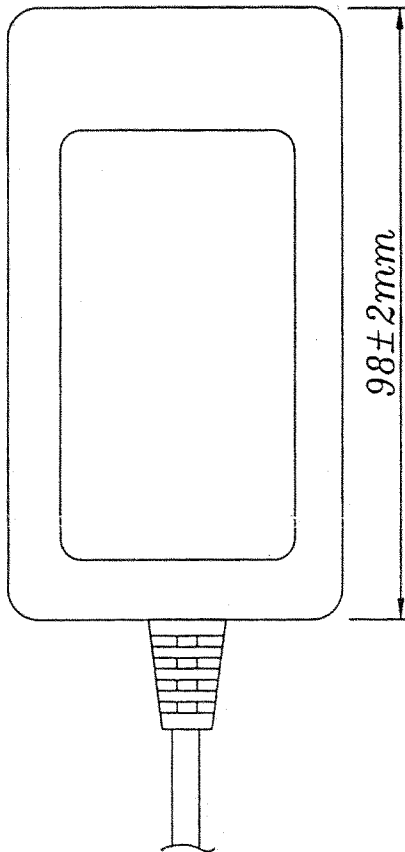
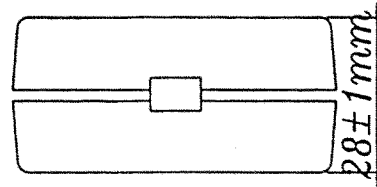
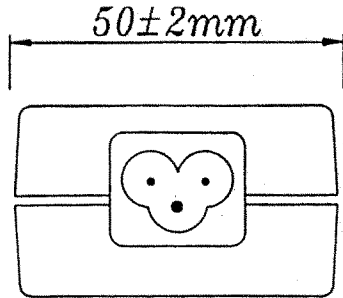
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UNIT: mm

DATE: 05/04/01

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| TEST CONDITION                                    | I/P  | SPEC.       | 1   | 2   | 3 | 4 | 5 | 6 |
|---|------|-------------|-----|-----|---|---|---|---|
| LINE REGULATION<br>AT LOAD 3.3A<br>OUTPUT VOLTAGE | 90V  | 9VDC<br>±5% | 8.8 | 8.7 |   |   |   |   |
|   | 115V |             | 8.8 | 8.7 |   |   |   |   |
|   | 130V |             | 8.8 | 8.7 |   |   |   |   |
|   | 190V |             | 8.8 | 8.7 |   |   |   |   |
|   | 230V |             | 8.8 | 8.7 |   |   |   |   |
| Ripple Noise (V p-p)                              | 100V | 1000 mV     | 42  | 39  |   |   |   |   |
|   | 230V | Max.        | 36  | 34  |   |   |   |   |

| TEST CONDITION                                  | I/P  | SPEC.       | 1    | 2    | 3 | 4 | 5 | 6 |
|---|------|-------------|------|------|---|---|---|---|
| LINE REGULATION<br>AT LOAD 0A<br>OUTPUT VOLTAGE | 90V  | 9VDC<br>±5% | 9.26 | 9.24 |   |   |   |   |
|   | 115V |             | 9.26 | 9.24 |   |   |   |   |
|   | 130V |             | 9.26 | 9.24 |   |   |   |   |
|   | 190V |             | 9.26 | 9.24 |   |   |   |   |
|   | 230V |             | 9.26 | 9.24 |   |   |   |   |
| Ripple Noise (V p-p)                            | 100V | 100 mV      | 3    | 3    |   |   |   |   |
|   | 230V | Max.        | 4    | 5    |   |   |   |   |

| INPUT CHARACTERISTICS: |               |             |              |            |
|------------------------|---------------|-------------|--------------|------------|
| INPUT VOLTAGE          | INPUT CURRENT | INPUT POWER | POWER FACTOR | EFFICIENCY |
| 90V                    | 0.64          | 34.8        | 0.68         | 76.3       |
| 115V                   | 0.53          | 34.2        | 0.53         | 77.4       |
| 130V                   | 0.48          | 34.1        | 0.46         | 77.9       |
| 180V                   | 0.40          | 33.7        | 0.40         | 78.6       |
| 230V                   | 0.36          | 34.2        | 0.35         | 77.2       |
| 260V                   | 0.36          | 35.2        | 0.33         | 75.2       |

| OUTPUT POWER PROTECTION: |      |      |      |      |       |      |
|--------------------------|------|------|------|------|-------|------|
| INPUT                    | 90V  | 115V | 132V | 180V | 230V  | 264V |
| RESULT                   | 50.5 | 54.6 | 51.6 | 50.3 | 52.11 | 54.3 |

| OVER CURRENT PROTECTION: |     |      |      |      |      |      |
|--------------------------|-----|------|------|------|------|------|
| INPUT                    | 90V | 115V | 132V | 180V | 230V | 264V |
| RESULT                   | 6.0 | 7.4  | 7.2  | 6.6  | 6.8  | 7.0  |