

# MTI 18 dBi Panel Ant.

## Specification

### 2.4 GHz (WLL) SUBSCRIBER ANTENNA

|                                      |                                         |
|--------------------------------------|-----------------------------------------|
| MTI part number                      | MT-345004                               |
| Regulatory Compliance:               | ETSI-DE/TM-4060 ATS 300 019<br>part 1-4 |
| <b>1. ELECTRICAL</b>                 |                                         |
|                                      |                                         |
| FREQUENCY RANGE ( GHz)               | 2.4-2.5                                 |
| GAIN (dBi)                           | 18 (min)                                |
| VSWR                                 | 1.5 : 1(max)                            |
| 3 dB BEAMWIDTH: AZIMUTH<br>ELEVATION | 30°(nom)<br>30° (nom)                   |
| POLARIZATION                         | LINEAR(vertical or horizontal)          |
| VSWR                                 | 1.5:1 (max)                             |
| SIDELOBES:                           | TS3                                     |
| CROSS POLARIZATION:                  | -15 dB (max)                            |
| F/B RATIO:                           | -20 dB (max)                            |
| LIGHTNING PROTECTION                 | DC grounded                             |
|                                      |                                         |
| <b>2. MECHANICAL</b>                 |                                         |
|                                      |                                         |
| DIMENSIONS(L x W x D) mm             | 480x480x36                              |
| WEIGHT (kgs)                         | 3.5 max                                 |
| CONNECTOR                            | N-Type Female*                          |
|                                      |                                         |
| <b>3. ENVIRONMENTAL</b>              |                                         |
|                                      |                                         |
| TEMPERATRE (OPERATING):              | -40° to +65° C                          |
| WIND LOAD(SURVIVAL) :                | 220 km/hr                               |
| HUMIDITY                             | 0 – 100 %                               |
| RADIAL ICE LOAD:                     | 25 mm radial                            |
|                                      |                                         |

\* Also available with an SMA connector ( MT-345004/A)

|      |  |             |     |
|------|--|-------------|-----|
| SIZE |  | DWG NO      | REV |
| A    |  | RD40872400C |     |

| REVISION RECORD |     |             |      |      |
|-----------------|-----|-------------|------|------|
| REV             | ECO | DESCRIPTION | APVD | DATE |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |

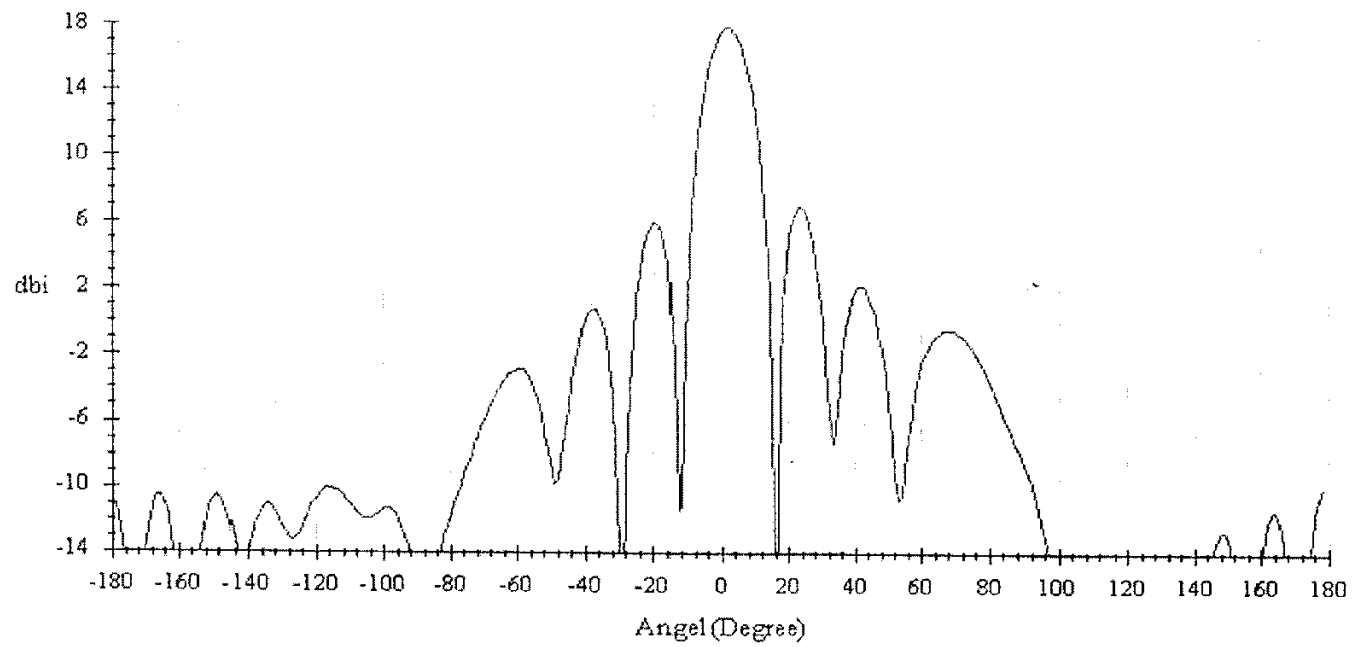
|  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|  | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
|  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|  | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |
|  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|  | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
|  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

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|            |      |      |      |                                                                                                                                                          |
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| PROJECT NO |      |      |      |  <b>MTI TECHNOLOGY AND ENGINEERING (1993) LTD</b><br>ANTENNA DIVISION |
| N          | NAME | SIGN | DATE |                                                                                                                                                          |
|            |      |      |      | TITLE                                                                                                                                                    |
|            |      |      |      | SPECIFICATION FOR MT-345004                                                                                                                              |

|    |  |  |  |            |                |              |
|----|--|--|--|------------|----------------|--------------|
|    |  |  |  |            |                |              |
|    |  |  |  | SIZE       | CLASSIFICATION | DWG NO       |
|    |  |  |  | A          | NONE           | RD40871200C  |
| SG |  |  |  | SCALE NONE |                | SHEET 1 OF 2 |

mt-345004 el Freq: 2.4GHz

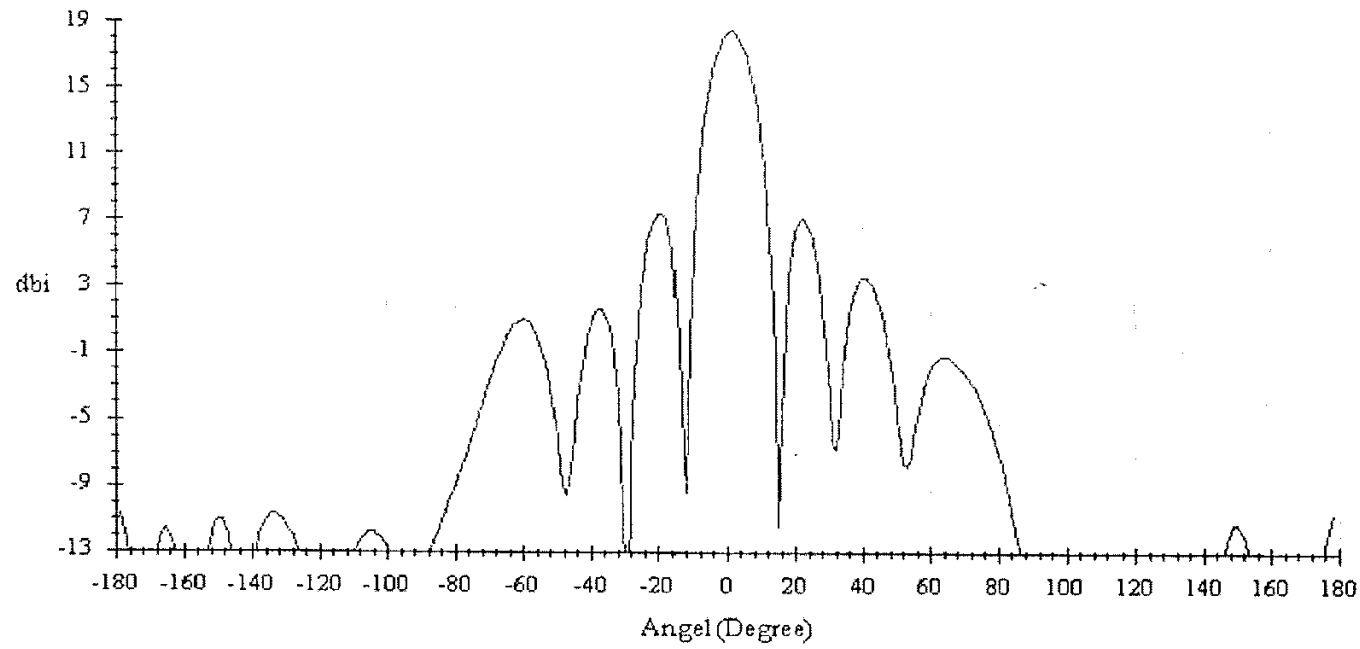


BW = 12.01

Date: 01/11/00

Tested By: \_\_\_\_\_

mt-345004 el Freq: 2.45 GHz



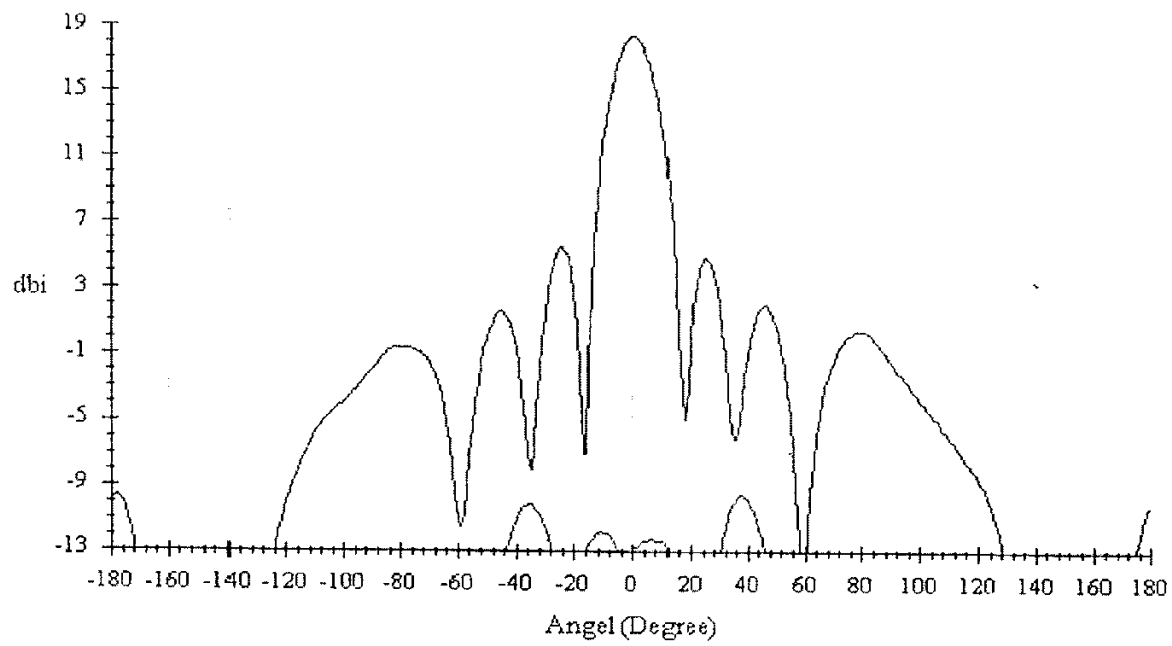
BW = 11.2

Date: 01/11/00

Tested By: \_\_\_\_\_

2

mt-345004 az Freq: 2.45 GHz



— MAX=-9.5508

— MAX= 18.3984

—  
—  
—  
—  
—  
—  
—

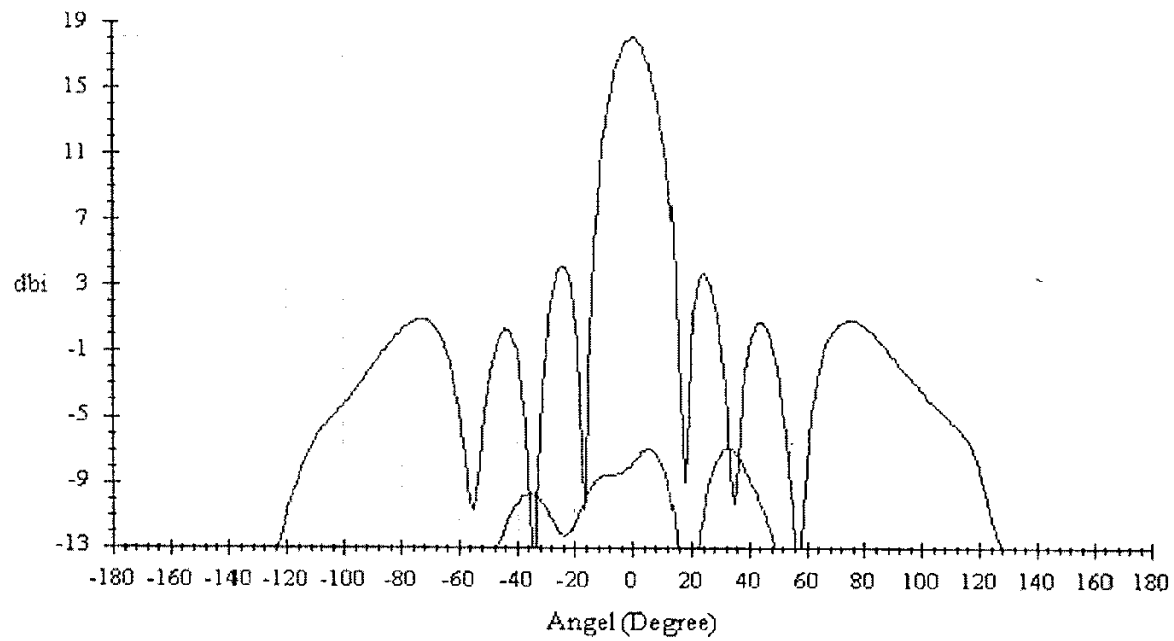
BW = 13.88

Date: 01/11/00

Tested By: \_\_\_\_\_

3

mt-3345004 az Freq: 2.5 GHz



— MAX=-6.9407

— MAX= 18.1054

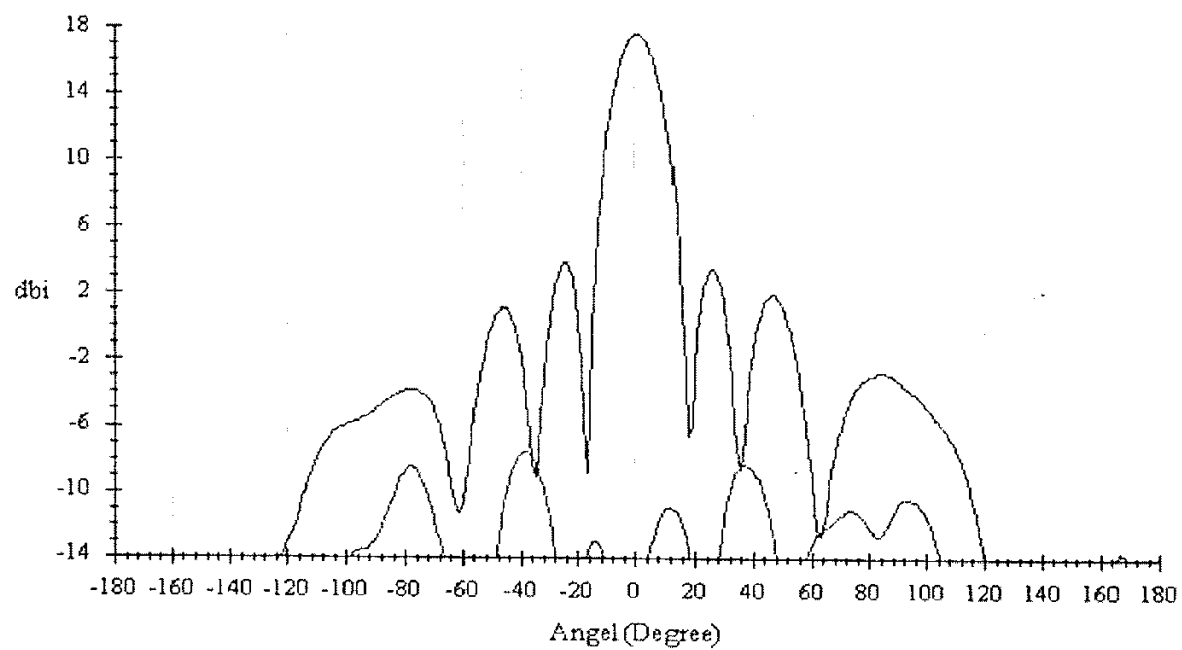
BW = 13.81

Date: 01/11/00

Tested By: \_\_\_\_\_

4

mt-345004 az Freq: 2.4GHz



— MAX=-7.593

— MAX= 17.6539

—  
—  
—  
—  
—  
—

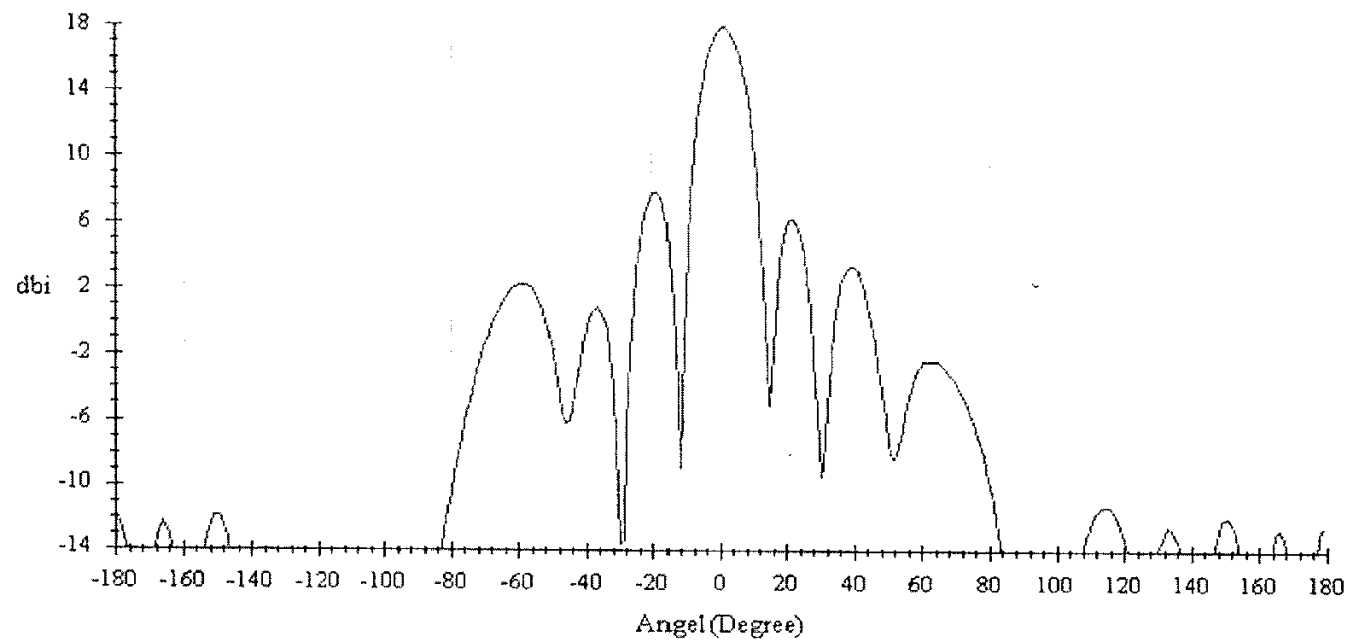
BW = 14.74

Date: 01/11/00

Tested By: \_\_\_\_\_

5

mt-345004 el Freq: 2.5 GHz



BW = 12.43

Date: 01/11/00

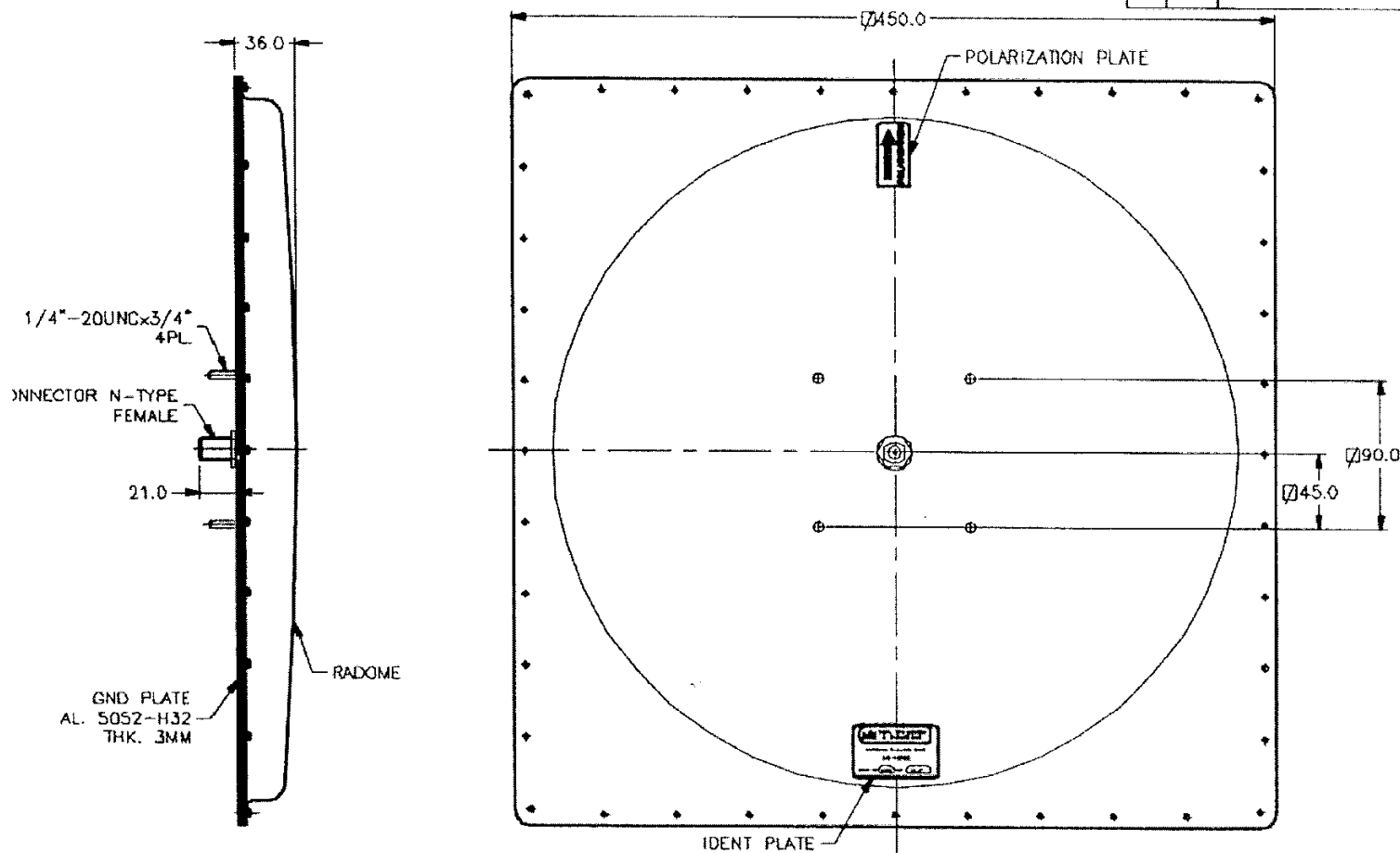
Tested By: \_\_\_\_\_

6

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|-----------------------|---|---|---|--------------|
| 5                     | 4 | 3 | 2 | 1            |
|                       |   |   |   | SHEET NO     |
|                       |   |   |   | A LATEST REV |

| REVISION RECORD |      |             |        |          |
|-----------------|------|-------------|--------|----------|
| REV             | ECO  | DESCRIPTION | APVD   | DATE     |
| A               | CHSS | RELEASED    | YAL IL | 31.12.00 |
|                 |      |             |        |          |
|                 |      |             |        |          |
|                 |      |             |        |          |
|                 |      |             |        |          |



ALL DIMENSIONS IN REF

| UNLESS OTHERWISE SPECIFIED |         |
|----------------------------|---------|
| DIMENSIONS ARE IN mm       |         |
| PER ANSI Y14.5M-1983       |         |
| TOLERANCE                  |         |
| LINEAR                     | ANGULAR |
|                            |         |
| H.C. ANGLE PROJECTION      |         |
|                            |         |

| CONTRACT TO |          |      |          |  |
|-------------|----------|------|----------|--|
| DWG         | YAL      | YAL  | 6.12.00  |  |
| CHKD        | GILLER   | H.C. | 20.12.00 |  |
| DSGN        | PETER    | P.T. | 11.12.00 |  |
| PROJ        | PETER    | P.T. | 11.12.00 |  |
| MFG         |          |      |          |  |
| QA          | MOTOVICH | MOTI | 23.12.00 |  |

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|----------------------------------------------------------------|--|--------|--|--|
| TITLE                                                          |  |        |  |  |
| ANTENNA 2.4-2.5GHz                                             |  |        |  |  |
| MT-10006 ICD                                                   |  |        |  |  |
| SIZE                                                           |  | DRG NO |  |  |
| C                                                              |  |        |  |  |
|                                                                |  |        |  |  |

MT-10006

RD40871300C

4

3

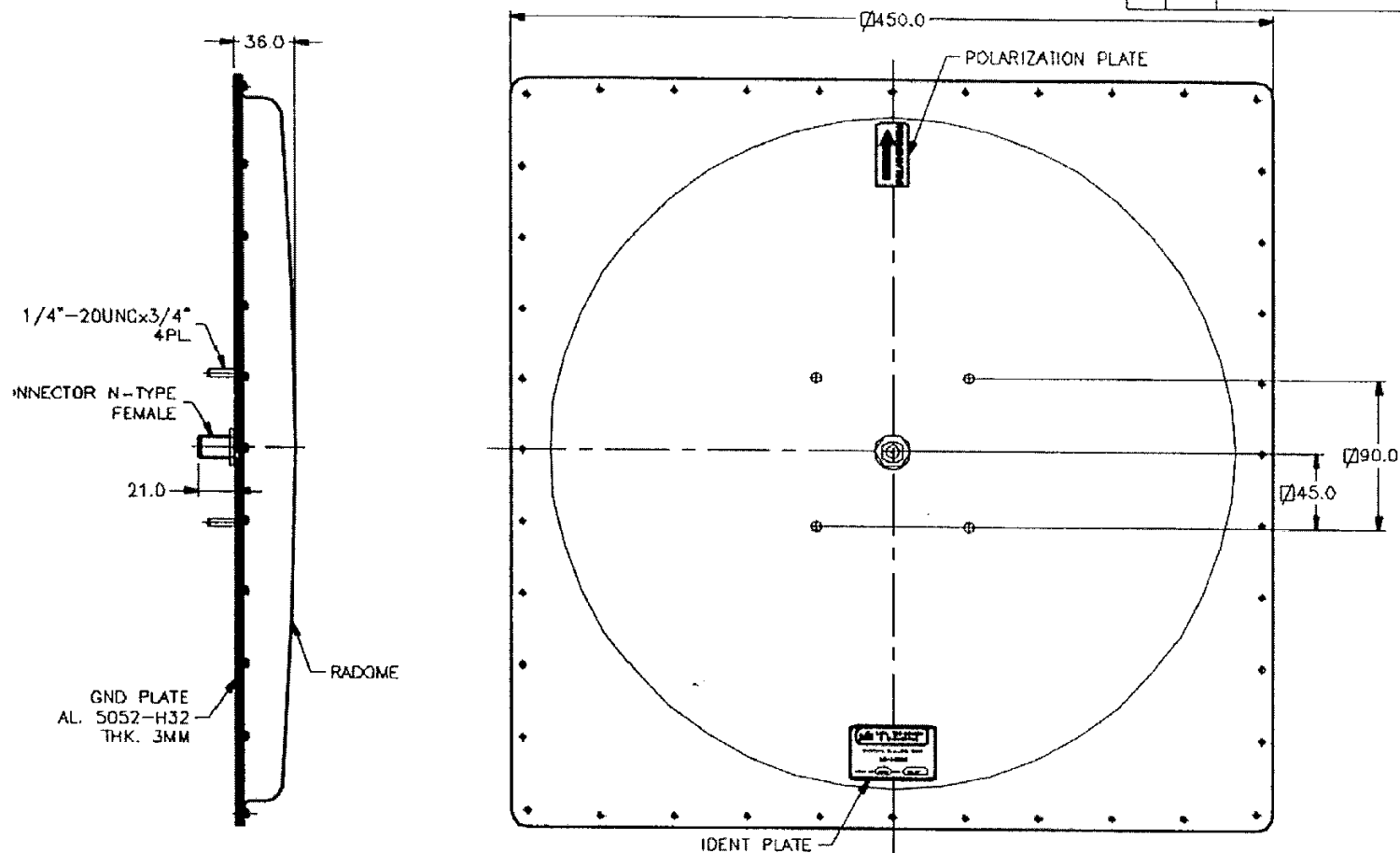
2

1

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|-----------------------|---|---|---|---|------------|
| 5                     | 4 | 3 | 2 | 1 | A          |
|                       |   |   |   |   | LATEST REV |

| REVISION RECORD |      |             |         |          |
|-----------------|------|-------------|---------|----------|
| REV             | EOD  | DESCRIPTION | APVD    | DATE     |
| A               | CNS5 | RELEASED    | Yael H. | 31.12.00 |
|                 |      |             |         |          |
|                 |      |             |         |          |
|                 |      |             |         |          |



ALL DIMENSIONS IN REF

UNLESS OTHERWISE SPECIFIED

CONTRACT TO

DIMENSIONS ARE IN mm.  
PER AMS114.50-1982TOLERANCE  
LINEAR ANGULAR

1st. ANGLE PROJECTION

|      |          |      |          |
|------|----------|------|----------|
| DWG  | Yael     | Yael | 0.12.00  |
| CHKD | Yael     | H.C. | 20.12.00 |
| DSGN | T.PETER  | P.T. | 11.12.00 |
| PROJ | T.PETER  | P.T. | 11.12.00 |
| MFG  |          |      |          |
| QA   | MOTOVICH | MOTI | 25.12.00 |

M.T.E. TECHNOLOGY AND ENGINEERING (1983) LTD.  
ANTENNA DIVISION

TITLE

ANTENNA 2.4-2.5GHz  
MT-10006 ICD

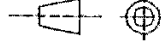
SIZE

C

DWG NO

RD40871300C

MT-10006

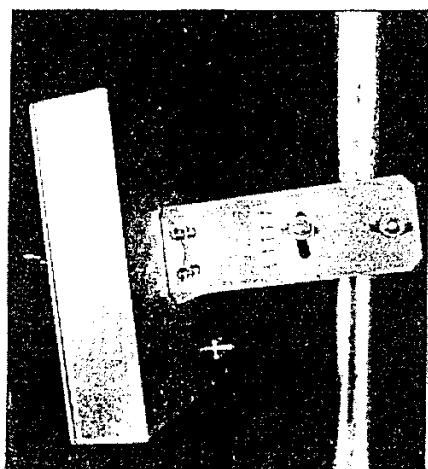


D

C

B

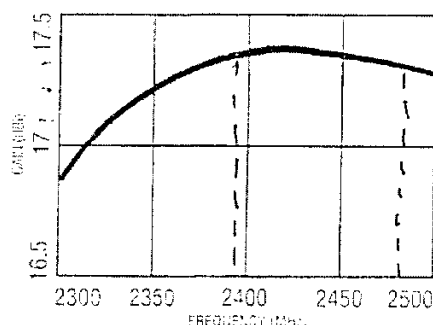
A

**TIL-TEK***TIL-TEK 17 dBi PANEL ANT.***TA-2308  
DIRECTIONAL ANTENNA**

The TA-2308 panel antenna consists of a broadband dipole array on a printed circuit board, enclosed in an aluminum cavity with a plastic front cover. It was designed specifically for point-to-multipoint rural radio applications. The antenna may be mounted for either vertical or horizontal polarization and can be tilted up or down. The antenna elements are at DC ground to aid in lightning protection.

**ELECTRICAL SPECIFICATIONS**

Frequency Range: 2300 - 2500 MHz  
Gain: 17.0 dBi nominal (see graph below)  
VSWR: 1.5:1 maximum  
Polarization: Vertical / Horizontal  
Power Rating: 25 watts  
H-Plane Beamwidth (-3 dB): 22 degrees  
E-Plane Beamwidth (-3 dB): 22 degrees  
Cross-Polarization Discrimination: 20 dB minimum  
Impedance: 50 ohms nominal  
Termination: Type N female

**GAIN vs. FREQUENCY****MECHANICAL SPECIFICATIONS**

Length: 12.6 in. (320 mm)  
Width: 11.8 in. (300 mm)  
Depth: 3.0 in. (76 mm)  
Weight Including Clamp: 7 lb. (3.2 kg)  
Rated Wind Velocity: 125 mph (200 km/hr)  
Horizontal Thrust at Rated Wind: 58 lb. (26 kg)  
Mounting: Mounts to a 0.75 - 3.0 in. O.D. (19 - 76 mm) pipe.  
TMC-105 clamp supplied

**MATERIALS**

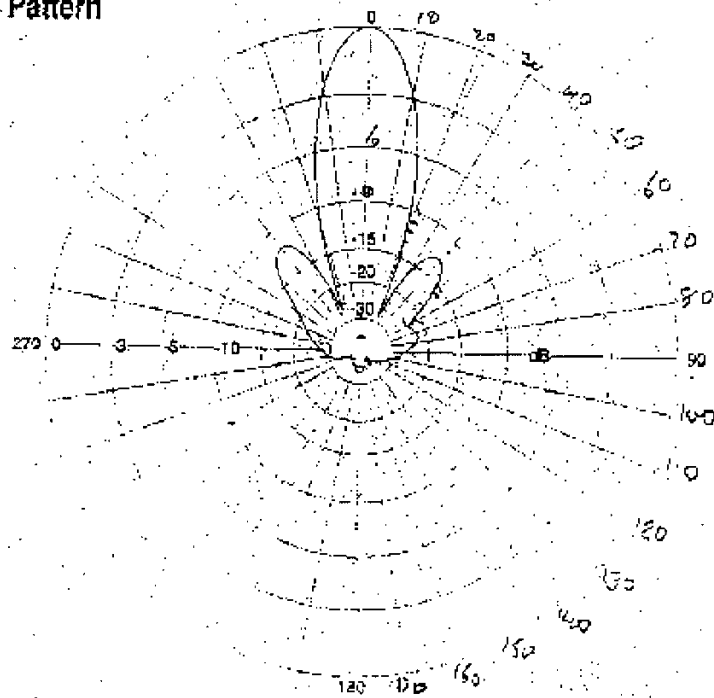
Radiating Elements: Tin plated  
copper on PCB  
Radome: White ASA, UV stabilized  
Reflector: Irridited aluminum  
Clamp: Hot dip galvanized steel

**TIL-TEK ANTENNAS INC.**

P.O. Box 550, 500 Van Buren St., Kemptville, Ontario, Canada, K0G 1J0  
Tel (613) 258-5928 Fax (613) 258-7418 e-mail: info@tiltek.com

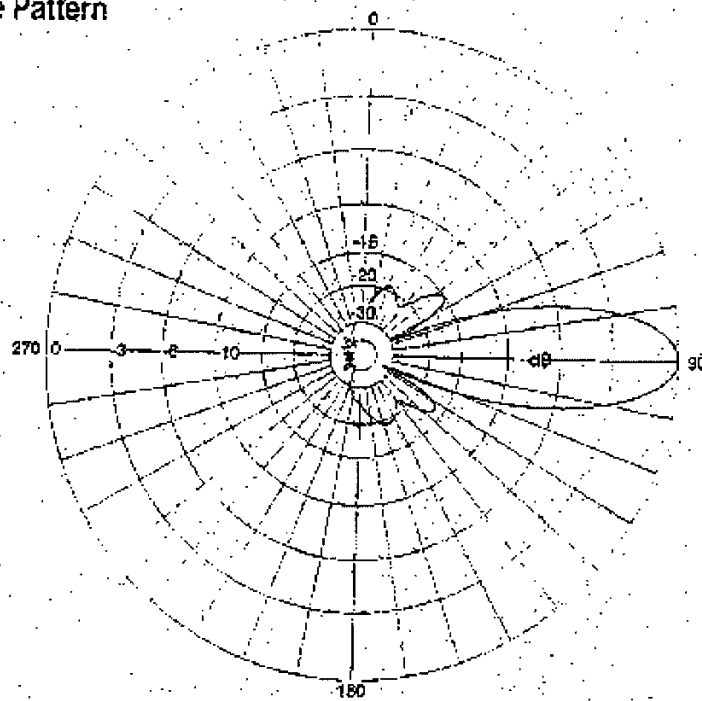
# TA-2308

H-Plane Pattern



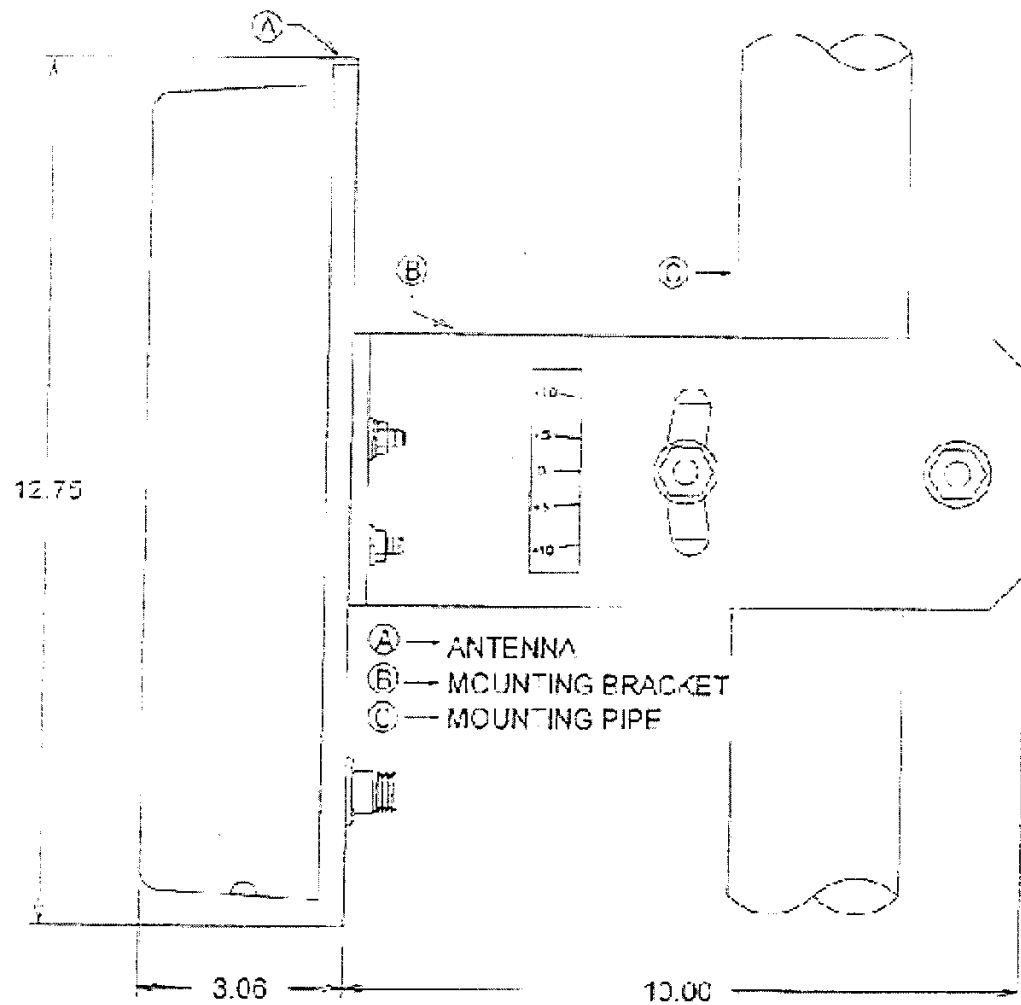
TIL-TEK

E-Plane Pattern



TIL-TEK

TA-2408 (Side View)



# ARTESYN GUIDE DESKTOP PSU



| USED ON      | MODEL NO.      | REV. | ECO      | DESCRIPTION | DATE | APPROVED |
|--------------|----------------|------|----------|-------------|------|----------|
| 7090616-0000 | SSL12-7632-NO1 | 1A   | 10009463 | PROTOTYPE   | 2/01 |          |

THIS PRODUCT SPEC. CONSISTS OF :  
 SWITCHING POWER SUPPLY SPECIFICATION  
 SINGLE OUTPUT AT 6VDC  
 PAGES 1 THROUGH 2

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|                                                                                                                  |                                                                                                                                                                                                                                                                                                       |                                                                                                                    |                                                                                                              |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCE ARE:<br>.X=±      ANGLE=±<br>.XX=±<br>.XXX=± | APPROVALS:      DATE<br>DRAWN      FONG LEE      2/14/01<br>CHECKED<br>ENG.      ____<br>MFG. ENG.<br>RELEASED                                                                                                                                                                                        |                                                                                                                    |                                                                                                              |
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## **SWITCHING POWER SUPPLY SPECIFICATION SINGLE OUTPUT AT 6VDC**

### **1. General Description**

Universal input, switch-mode power supply, operating at input voltages from 90 to 264 VAC. Single output voltage at +6 VDC, 2.0 A.

### **2. Electrical characteristics**

#### **2.1 Input**

- 2.1.1 Input voltages: 90 to 264 VAC full loads.
- 2.1.2 Input frequency: 47 - 63 Hz
- 2.1.3 AC input current: 0.6A max at 90 VAC full load.
- 2.1.4 AC input connector: Male receptacle, 2-prong per IEC 520 - C8.

#### **2.2 Output**

- 2.2.1 Output voltage: +6 VDC, 0 - 2.0 A
- 2.2.2 Output ripple noise: 60 mVp-p maximum at input voltages from 90 to 264 VAC  
Note: Measured at 20 MHz bandwidth, differentially with 10  $\mu$ F Tantalum and 0.1  $\mu$ F ceramic capacitors across output.
- 2.2.3 Hold up time: 10 ms minimum at full load, 115 VAC.
- 2.2.4 Input protection: Internal primary current fuse, inrush limiting
- 2.2.5 Output protection: Short circuit protection (pulsing mode auto recovery) and 120 % over voltage protection (by zener clamp).
- 2.2.6 Combined line/load regulation: +6 VDC  $\pm$  5 % maximum at output
- 2.2.7 Efficiency: Not less than 65% at 115VAC, full load.

### **3. Environmental**

- 3.1 Operating temperature: 0 to 40 Degrees C
- 3.2 Storage temperature: - 20 to + 70 Degrees C.
- 3.3 Storage humidity: 20 to 90 % RH (Non - condensing).
- 3.4 Cooling: Non - vented case
- 3.5 Altitude: 0 -10,000 feet
- 3.6 Reliability: MIL - HDBK - 217F - 150,000 hours minimum

### **4. EMI**

The power supply should meet FCC class B, VDE 0871 class B, and EN550022 (CISPR 22 class B)

## **5.    Safety**

- 5.1    Isolation Voltage:            3000VAC Input to Output minimum
- 5.2    Leakage current:            0.2 mA max at 110VAC, 60Hz  
                                         0.4 mA max at 230VAC, 50Hz
- 5.3    Agency approvals:            UL1950  
                                         CSA 22.2 - 234  
                                         VDE0805  
                                         EN60950 (IC950)  
                                         Tested to UL1310 or UL1950  
                                         T-MARK (MITI)  
                                         Japan Dentori
- 5.4    Flammability:                UL94V-0

## **6.    Immunity Standards:**

- 6.1    Electrostatic discharge:    EN61000-4-2 level 4
- 6.2    Electrostatic air discharge: IEC801-2 level 3
- 6.3    RF field susceptibility:    IEC801-3 level 2
- 6.4    Fast transients:            EN61000-4-4 level 3
- 6.5    Surge susceptibility:        EN61000-4-5 level 3

## **7    Mechanical characteristics:**

- 7.1    DC output cable:            6 foot, two wire cable with straight 760 type barrel plug  
                                         ID = 1.3 mm, OD = 3.5 mm, barrel length = 10 mm.  
                                         Will have a ferrite bead close to the output connector.
- 7.2    Case:                        Fully enclosed plastic case.
- 7.3    Dimension diagram:        ( To be determined ).
- 7.4    Strain relief test:            ( Vender specifies )
- 7.5    Vibration test:               5Hz to 500Hz, 2.4G rms. Three axis random vibration,  
                                         10 minutes per axis
- 7.6    Drop test:                    Per MIL – STD - 810E 516.4 PART IV
- 7.7    Cord bending test:            ( Vender specifies )

## **8.    Marking and Packing Instructions:**

The power supply should be marked with Solectek part number, supplier part number, and all required agency markings. The power supplies are to be shipped to Solectek, or the distributor, bulk packaged.

| USED ON       | MODEL NO.      | REV. | ECO      | DESCRIPTION | DATE | APPROVED |
|---------------|----------------|------|----------|-------------|------|----------|
| 7090616--0000 | SSL12-7632-NO1 | 1A   | 10009463 | PROTOTYPE   | 2/01 |          |

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 PAGES 1 THROUGH 2

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|                                                                                                                                                               | DRAWN: FONG LEE      2/14/01<br>CHECKED:                                                                           |                                                                                       |              |
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- 2.1.2 Input frequency: 47 - 63 Hz
- 2.1.3 AC input current: 0.6A max at 90 VAC full load.
- 2.1.4 AC input connector: Male receptacle, 2-prong per IEC 320 - C8.

#### 2.2 Output

- 2.2.1 Output voltage: +6 VDC, 0 - 2.0 A
- 2.2.2 Output ripple/noise: 60 mVp-p maximum at input voltages from 90 to 264 VAC  
Note: Measured at 20 MHz bandwidth, differentially with 10  $\mu$ F Tantalum and 0.1  $\mu$ F ceramic capacitors across output.
- 2.2.3 Hold up time: 10 ms minimum at full load, 115 VAC.
- 2.2.4 Input protection: Internal primary current fuse, inrush limiting
- 2.2.5 Output protection: Short circuit protection (pulsing mode auto recovery) and 120 % over voltage protection (by zener clamp).
- 2.2.6 Combined line/load regulation: 6 VDC  $\pm$  5 % maximum at output
- 2.2.7 Efficiency: Not less than 65% at 115VAC, full load.

### 3. Environmental

- 3.1 Operating temperature: 0 to 40 Degrees C
- 3.2 Storage temperature: - 20 to + 70 Degrees C.
- 3.3 Storage humidity: 20 to 90 % RH (Non - condensing).
- 3.4 Cooling: Non - vented case
- 3.5 Altitude: 0 -10,000 feet
- 3.6 Reliability: MIL - HDBK - 217F 150,000 hours minimum

### 4. EMI

The power supply should meet FCC class B, VDE 0871 class B, and EN550022 (CISPR 22 class B)

## 5. Safety

- 5.1 Isolation Voltage: 3000VAC Input to Output minimum
- 5.2 Leakage current: 0.2 mA max at 110VAC, 60Hz  
0.4 mA max at 230VAC, 50Hz
- 5.3 Agency approvals: UL1950  
CSA 22.2 - 234  
VDE0805  
EN60950 (IC950)  
Tested to UL1310 or UL1950  
T-MARK (MITI)  
Japan Dentori
- 5.4 Flammability: UL94V-0

## 6. Immunity Standards:

- 6.1 Electrostatic discharge: EN61000-4-2 level 4
- 6.2 Electrostatic air discharge: IEC801-2 level 3
- 6.3 RF field susceptibility: IEC801-3 level 2
- 6.4 Fast transients: EN61000-4-4 level 3
- 6.5 Surge susceptibility: EN61000-4-5 level 3

## 7 Mechanical characteristics:

- 7.1 DC output cable: 6 foot, two wire cable with straight 760 type barrel plug  
ID = 1.3 mm, OD = 3.5 mm, barrel length = 10 mm.  
Will have a ferrite bead close to the output connector.
- 7.2 Case: Fully enclosed plastic case.
- 7.3 Dimension diagram: ( To be determined ).
- 7.4 Strain relief test: ( Vender specifies )
- 7.5 Vibration test: 5Hz to 500Hz, 2.4G rms. Three axis random vibration,  
10 minutes per axis
- 7.6 Drop test: Per MIL-STD-810E 516.4 PART IV
- 7.7 Cord bending test: (Vender specifies)

## 8. Marking and Packing Instructions:

The power supply should be marked with Solecetek part number, supplier part number, and all required agency markings. The power supplies are to be shipped to Solecetek, or the distributor, bulk packaged.

**NEW • DESKTOP POWER SUPPLIES**  
**• UNIVERSAL INPUT**  
**• COMPACT**

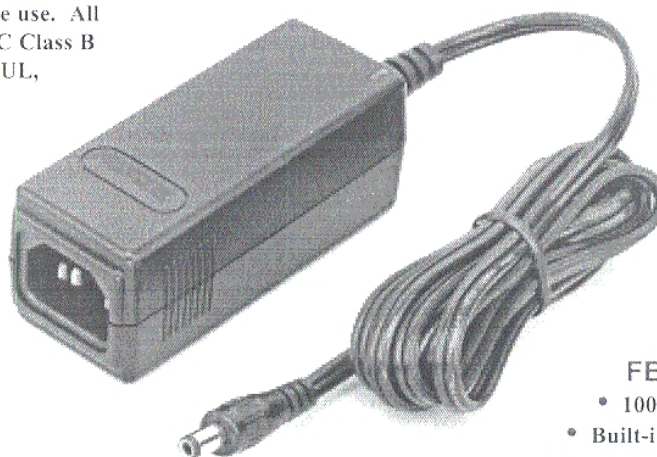
**15 WATT**

**SWITCHING  
POWER SUPPLY**



**DESCRIPTION**

The HUP15 Series of AC-DC switching power supplies provide 15 watts of continuous output power. They are enclosed in a 94V-0 rated polyphenylene oxide case with an IEC 320 inlet connector to mate with an interchangeable cord for worldwide use. All models meet CISPR Class B and FCC Class B emission limits, and are approved to UL, CSA, and TUV safety standards.



**FEATURES**

- 100% Burn-in
- Built-in EMI filter
- Small size, light weight
- Short circuit protection
- Input surge current protection
- Wide input voltage 90-264 VAC
- Approved to UL, CSA, and TUV safety standards
- CE Mark

**OUTPUT VOLTAGE/CURRENT RATINGS CHART**

| Model       | Output |      |       |      | Maximum Output Power |
|-------------|--------|------|-------|------|----------------------|
|             | Vnom   | Imin | Imax  | Tol. |                      |
| HUP15A-00   | 3.3V   | 0A   | 2.50A | 5%   | 12W                  |
| HUP15A-10   | 5V     | 0A   | 2.40A | 5%   | 12W                  |
| HUP15A-10-1 | 7V     | 0A   | 1.70A | 5%   | 15W                  |
| HUP15A-11   | 10V    | 0A   | 1.50A | 5%   | 15W                  |
| HUP15A-12   | 12V    | 0A   | 1.25A | 5%   | 15W                  |
| HUP15A-13   | 15V    | 0A   | 1.00A | 5%   | 15W                  |
| HUP15A-13-1 | 18V    | 0A   | 0.80A | 5%   | 15W                  |
| HUP15A-14   | 24V    | 0A   | 0.62A | 5%   | 15W                  |
| HUP15A-16   | 30V    | 0A   | 0.50A | 5%   | 15W                  |
| HUP15A-17   | 36V    | 0A   | 0.40A | 5%   | 15W                  |
| HUP15A-18   | 48V    | 0A   | 0.30A | 5%   | 15W                  |

## GENERAL SPECIFICATIONS

All specifications are typical at nominal line, full load, and 25°C.

|                        |                                                                                                 |
|------------------------|-------------------------------------------------------------------------------------------------|
| Efficiency:            | 60% min at 15W output                                                                           |
| Hold-up time:          | 5msec minimum                                                                                   |
| Line regulation:       | ±0.5% maximum at full load                                                                      |
| Inrush current:        | 15 amps@115 VAC, or<br>30 amps@230 VAC at 25°C cold start                                       |
| Withstand voltage:     | 3000 VAC from input to output<br>1500 VAC from input to ground<br>500 VAC from output to ground |
| Insulation resistance: | 50 Mohm min. from output to ground                                                              |
| Operating temperature: | 0°C to +70°C*                                                                                   |
| Storage temperature:   | -40°C to +85°C                                                                                  |
| MTBF:                  | 100,000 hours minimum at<br>full load at 25°C ambient                                           |
| EMI requirements:      | Meets conducted and radiated<br>limits of:<br>a) FCC20780 Level B<br>b) CISPR 22 Class B        |
| Safety requirements:   | Approved to:<br>a) UL 1950<br>b) CSA C22.2 No. 234<br>c) EN60950                                |

## INPUT SPECIFICATIONS

|                  |                           |
|------------------|---------------------------|
| Input voltage:   | 90 to 264 VAC             |
| Input frequency: | 47 to 63 Hz               |
| Input current:   | 0.4A maximum              |
| Safety ground:   |                           |
| leakage current: | 0.75mA max. @ 240VAC 50Hz |

## OUTPUT SPECIFICATIONS

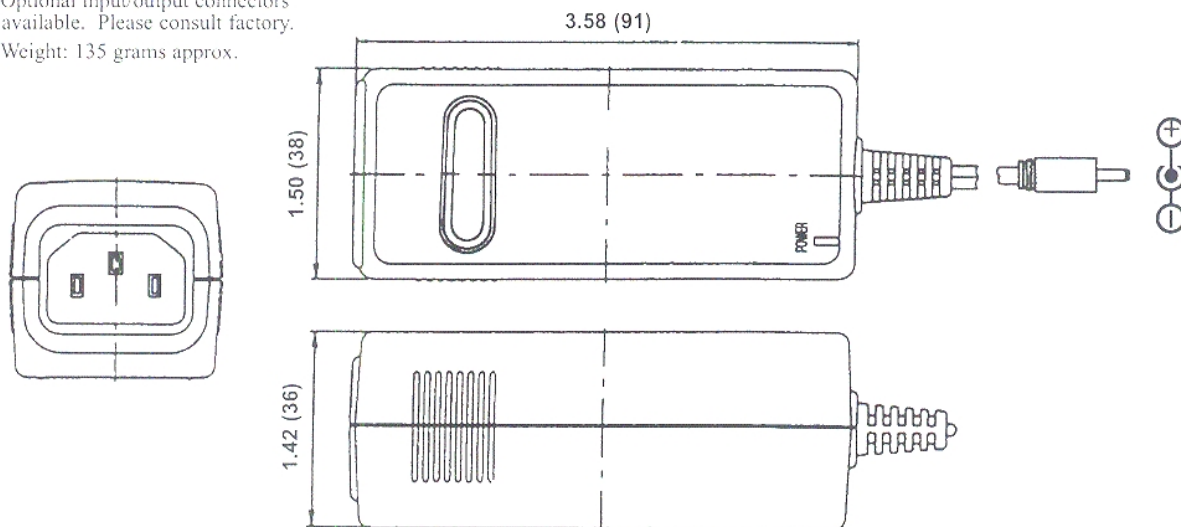
|                          |                                                                                                                                    |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Output voltage:          | See rating chart                                                                                                                   |
| Output current:          | See rating chart                                                                                                                   |
| Output power range:      | 0 to 15 Watts                                                                                                                      |
| Ripple and noise:        | 1% peak to peak maximum                                                                                                            |
| Overcurrent protection:  | All outputs protected to short<br>circuit conditions                                                                               |
| Temperature coefficient: | All outputs ±0.04%/°C maximum                                                                                                      |
| Transient response:      | Maximum excursion of 4% or better<br>on all models. Recovers to 1% of<br>final value within 500us after a<br>25% step load change. |

\* Derate linearly from 100% load at 40°C to 50% load at 70°C

## MECHANICAL SPECIFICATIONS

### NOTES:

1. Dimensions shown in inches (mm).
2. Tolerance 0.02 (0.5) maximum.
3. Output connector is 5.5mm outer diameter barrel. Inner diameter is 2.5mm with center positive (+)/outer shell negative(-) polarity.
4. Output cable length is 72.0".
5. Optional input/output connectors available. Please consult factory.
6. Weight: 135 grams approx.





**CUI STACK**



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connectors



switches



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## **PART SPECIFICATIONS**

**FOR APPROVAL**

**CUSTOMER:** SOLECTEK

**PART #:** DTS050240U-P7

**DESCRIPTION:** 5 VDC @ 2.4A  
UNIVERSAL DESKTOP SWITCHING PWR SUPPLY

**QUANTITY:** 2

**DATE:** February 12, 2001

**PREPARED BY:**

- ☐ Luis E. Alcalá  
International & Midwest Regional Sales Mngr. x325
- ☐ R. Trever Dougan  
Sales Manager, Components Division x315
- ☐ Mikael E. K. Nordstrom  
European & Southeast Regional Sales Mngr. x317
- ☐ Stacey E. Moen  
NE Regional Sales Manager x314
- ☐ Brennan M. Stack  
NW/ Rocky Mountain Regional Sales Mngr. x324

### **SPECIFICATION APPROVAL SIGN-OFF**

APPROVED BY: \_\_\_\_\_  
(PLEASE PRINT)

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

SPEC. SIGN-OFF VERIFIES THAT YOU HAVE TESTED THIS PRODUCT & THAT IT MEETS YOUR REQUIREMENTS. THESE SPECS REFLECT THE PART AS IT IS TO BE ORDERED. ORDERS WILL NOT BE PROCESSED UNTIL THIS SPEC HAS BEEN SIGNED AND RETURNED TO CUI STACK. THIS SPECIFICATION IS CONFIDENTIAL AND IS NOT TO BE DISTRIBUTED WITHOUT PRIOR APPROVAL FROM CUI STACK, INC.

SWITCHING POWER SUPPLY  
SPECIFICATION

MODEL NO. :  
SPEC REV. : 0

ISSUE DATE : 02/13/98  
PAGE : 1 OF 2

1. INPUT

1-1 AC INPUT VOLTAGE : 90 TO 264 VAC  
1-2 AC INPUT FREQUENCY : 47 TO 63 Hz  
1-3 AC INPUT CURRENT : 0.40 AMP (RMS) FOR 115 VAC  
0.20 AMP (RMS) FOR 230 VAC  
1-4 AC INRUSH CURRENT : 30 AMP-PEAK FOR 115 VAC  
50 AMP-PEAK FOR 230 VAC  
FULL LOAD, 25 DEG C, COLD START

2. OUTPUT

2-1 OUTPUT VOLTAGE : + 5 V  
2-2 TOTAL REGULATION : +/- 5 %  
2-3 MIN LOAD CURRENT : 0.0 A  
2-4 MAX LOAD CURRENT : 2.40 A  
2-5 RIPPLE AND NOISE : 50 mVp-p

\*1. NOISE TEST FREQUENCY AT 20 MHz

EACH OUTPUT BYPASS A 0.1uF & A 10uF CAPACITORS TO GND  
TEST TEMPERATURE 25 °C , INPUT VOLTAGE 115VAC

3. OVERALL PERFORMANCE

3-1 TOTAL OUTUT POWER : 12 W  
3-2 EFFICIENCY : 60 % MIN. AT 115 VAC , 60 Hz , FULL LOAD  
3-3 RESE TIME : 100 mSEC.max

4. PROTECTION

4-1 OVER-CURRENT PROTECTION : SHORT CIRCUIT PROTECTION  
4-2 TOTAL POWER PROTECTION

5. ENVIRONMENTAL

5-1 OPREATING TEMPERATURE : 0 °C TO 40°C  
5-2 STORAGE TEMPERATURE : -40 °C TO 70 °C  
5-3 OPERATING HUMIDITY : 10-90% RH NON-CONDENSING  
5-4 STORAGE HUMIDITY : 5-95% RH NON-CONDENSING  
5-5 MECHANICAL SIZE : 100 (L) x 50 (W) x 35 (H) mm

SWITCHING POWER SUPPLY  
SPECIFICATION

MODEL NO. :  
SPEC REV. : 0

ISSUE DATE : 02/13/98  
PAGE : 2 OF 2

6. SAFETY STANDARDS

6-1 DESIGNED TO MEET THE STANDARDS : UL , CSA , TUV

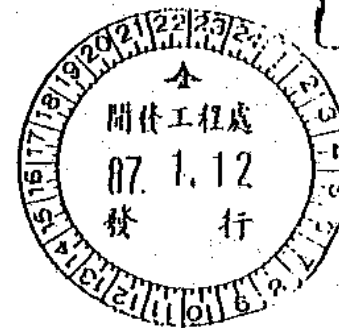
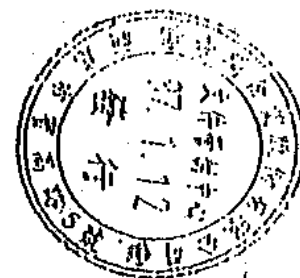
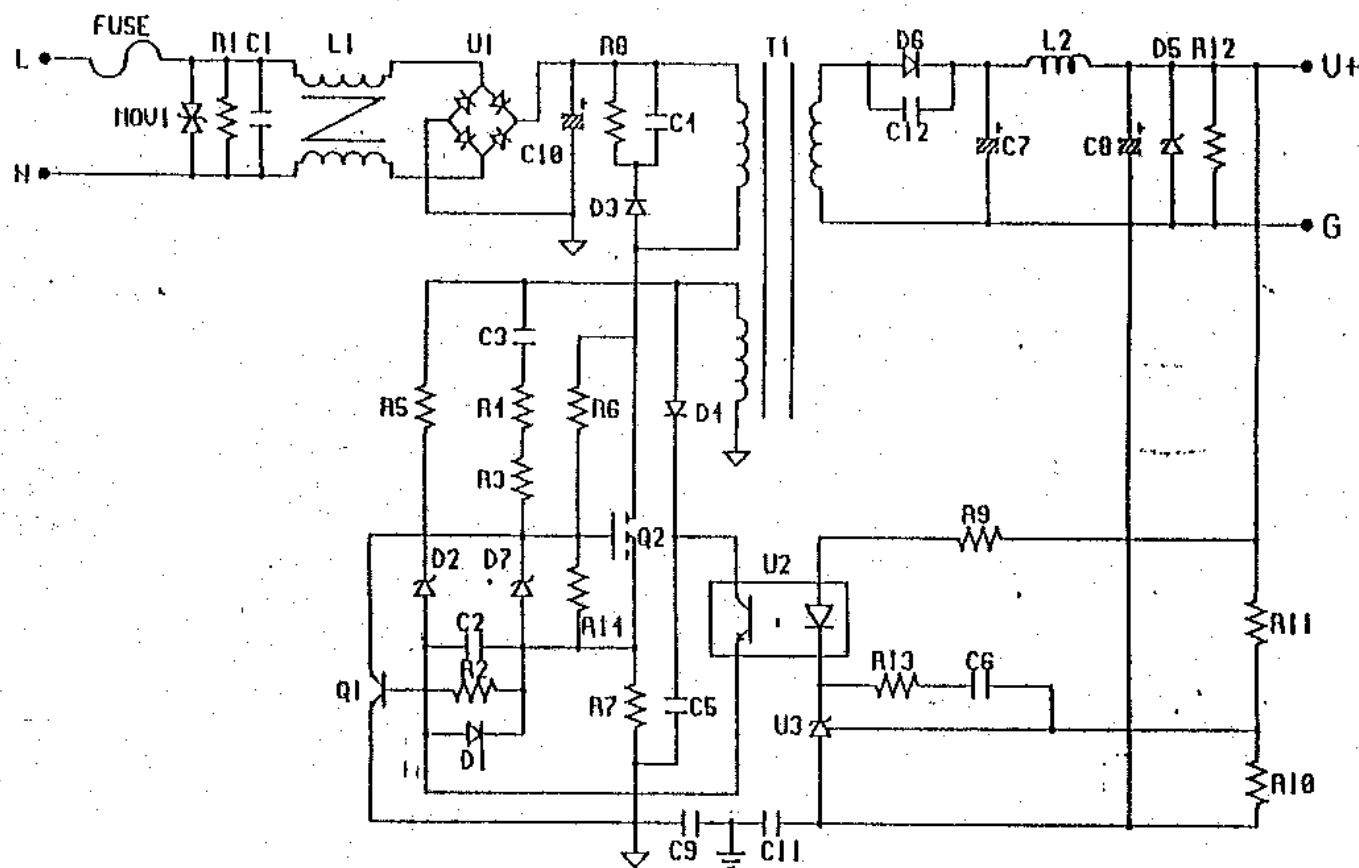
7. DIELECTRIC WITHSTAND TEST

7-1 INPUT TO OUTPUT : 3000 V<sub>rms</sub> , 10 mA , 1 MIN  
7-2 INPUT TO SAFETY GND : 1800 V<sub>rms</sub> , 10 mA , 1 MIN  
7-3 LEAKAGE CURRENT : 0.75 mA MAX

8. RELIABILITY

8-1 BURN IN : 4 HRS , 40+/-5°C , FULL LOAD , 230VAC , 60Hz

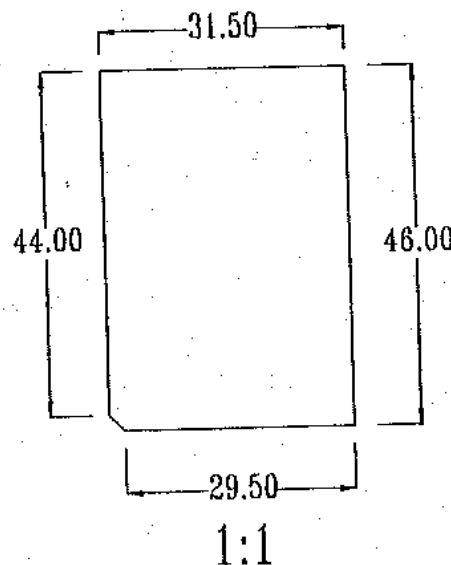
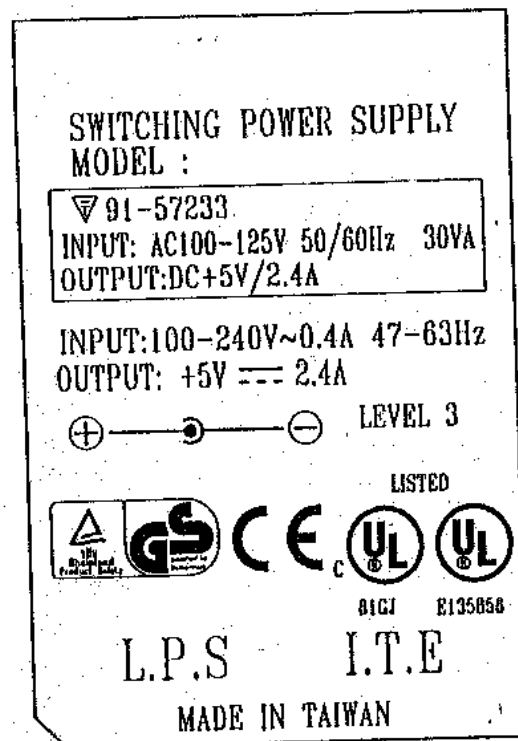
| FROM NO.1 |      | COMPUTER NO. |      |    |  |
|-----------|------|--------------|------|----|--|
| REV       | ZONE | DESCRIPTION  | DATE | BY |  |
|           |      |              |      |    |  |
|           |      |              |      |    |  |
|           |      |              |      |    |  |



正本相符

| MODEL NO. |  | PAGE 1 OF 1 |  | DEPARTMENT | SCALE | UNIT   | TOLERANCE | PART NAME |          | PART NO.      |  | REV |
|-----------|--|-------------|--|------------|-------|--------|-----------|-----------|----------|---------------|--|-----|
|           |  |             |  | R&D SPS    |       |        |           | 線路圖       |          |               |  | B   |
|           |  |             |  | APPD.      | CKD.  | SAFETY | MATERIAL  | DWG BY    | DATE     | DRAWING NO.   |  | REV |
|           |  |             |  | 陸育坤        | 鄭立克   |        |           | Lica      | 12-31-97 | FO-R/DS 86434 |  | B   |

|           |      |              |                               |      |    |
|-----------|------|--------------|-------------------------------|------|----|
| FROM NO:1 |      | COMPUTER NO. | YUAN\R3LABEL\0151D-05-T157233 |      |    |
| REV       | ZONE | DESCRIPTION  |                               | DATE | BY |
|           |      |              |                               |      |    |
|           |      |              |                               |      |    |
|           |      |              |                               |      |    |

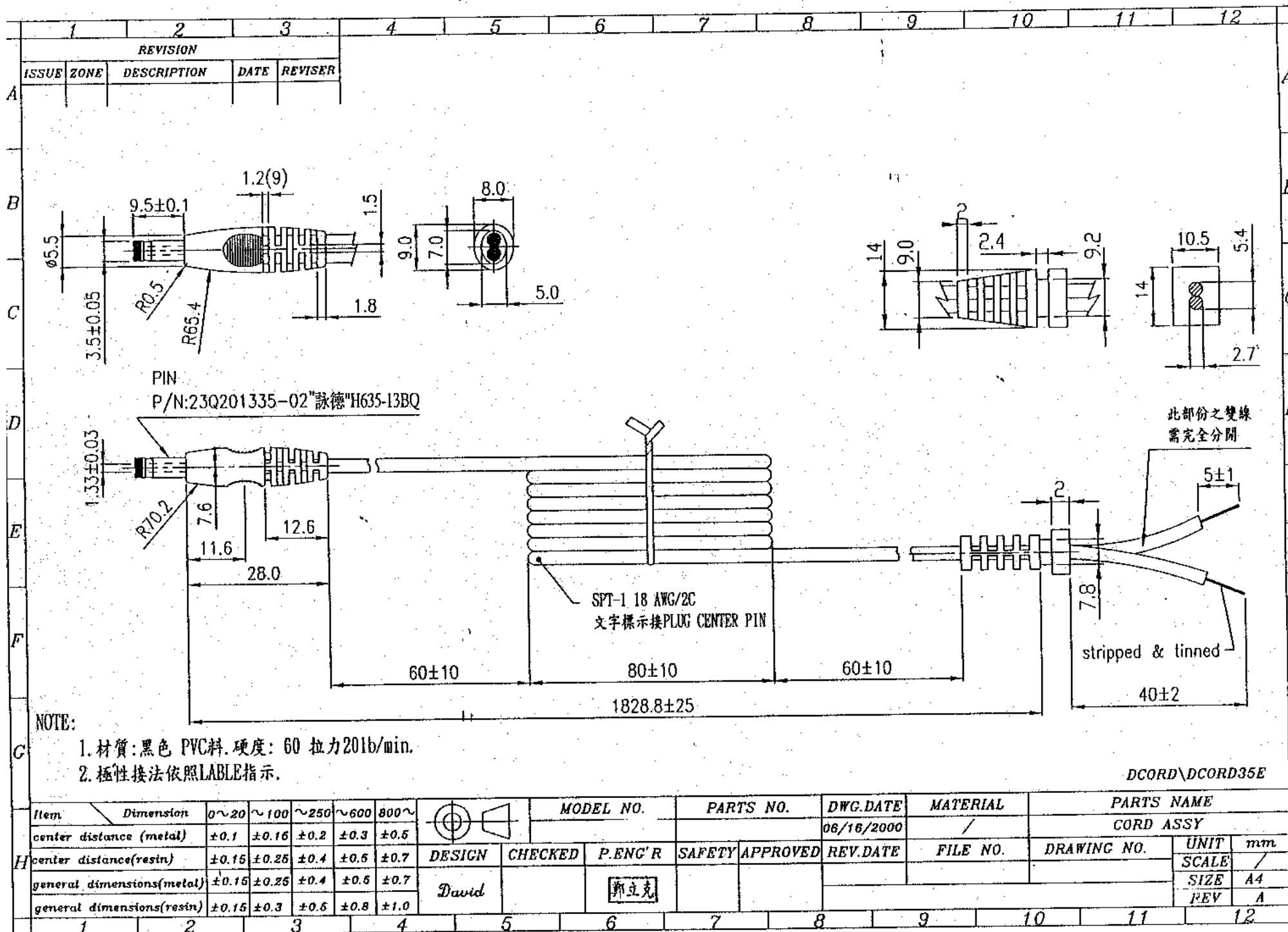


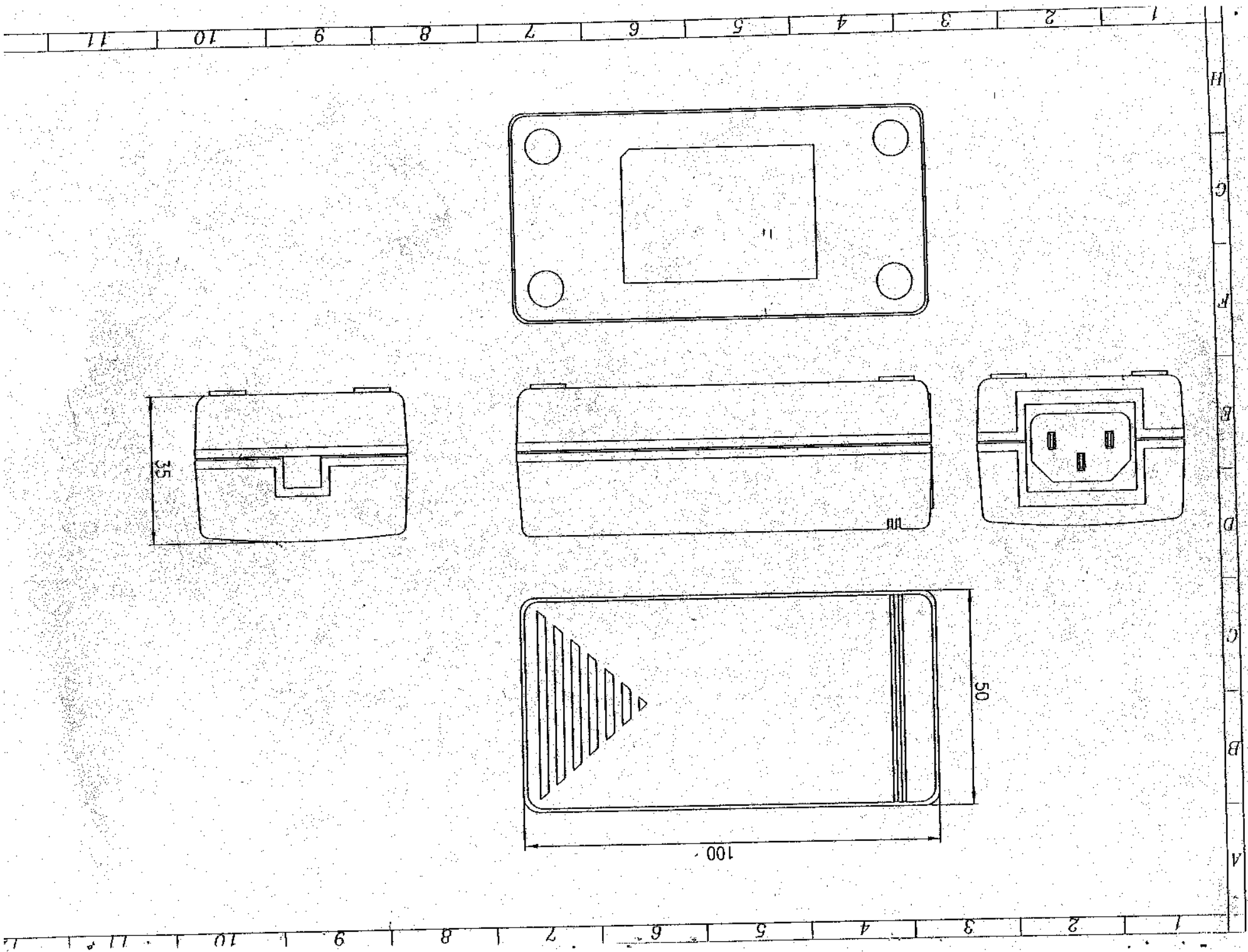
NOTE:

1. 材質 : PVC (UL APPROVAL)
2. 黑底銀字
3. 自黏性
4. 待業務確認安規等各項再行製作生

2:1

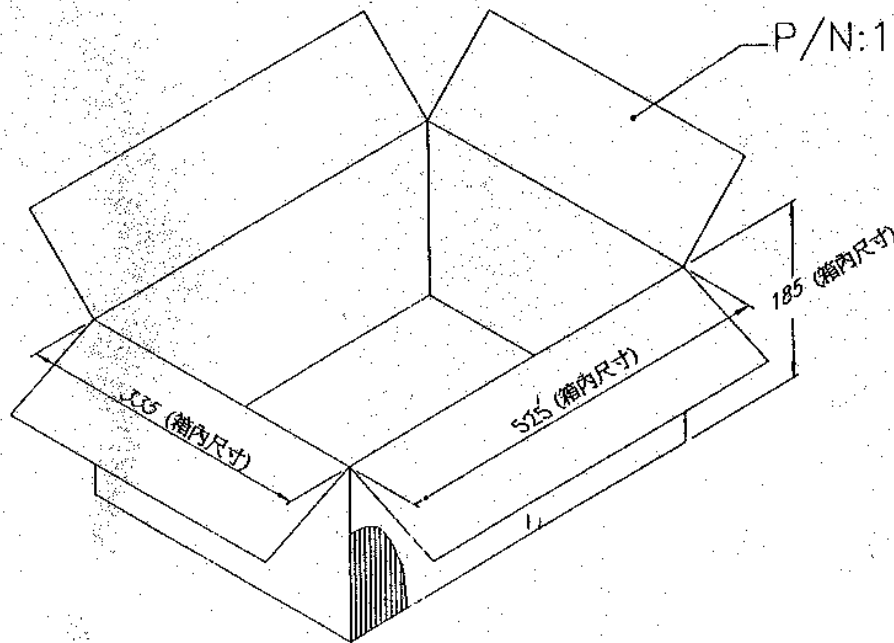
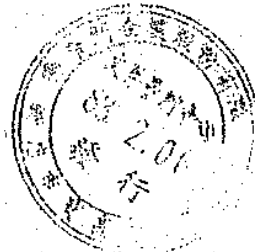
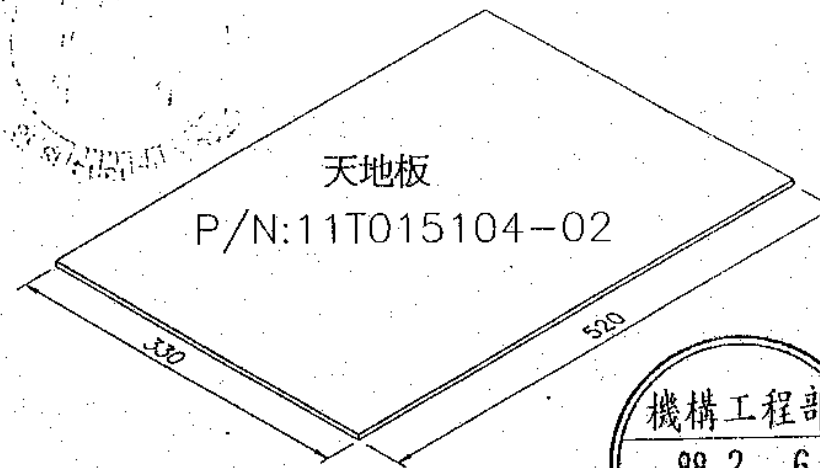
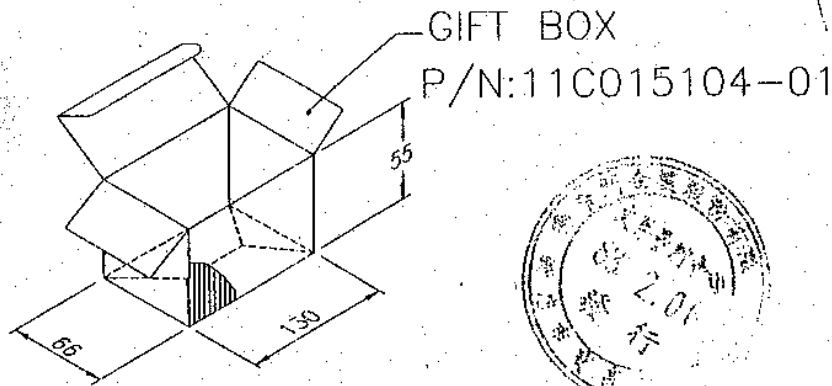
|           |             |            |       |        |           |           |          |             |   |     |
|-----------|-------------|------------|-------|--------|-----------|-----------|----------|-------------|---|-----|
| MODEL NO: | PAGE 1 OF 1 | DEPARTMENT | SCALE | UNIT   | TOLERANCE | PART NAME |          | PART NO.    |   | REV |
|           |             | R&D SPS    | 1:1   | mm     | +0-0.5mm  | LABEL     |          |             |   | A   |
|           |             | APPD.      | CKD.  | SAFETY | MATERIAL  | DWG BY    | DATE     | DRAWING NO. |   | REV |
|           |             |            | 鄭立克   | 包中玉    |           | YUAN      | 12-13-99 | FO-S        | B | A   |





分發單位: 11

| REVISION |      |             |      |         |
|----------|------|-------------|------|---------|
| ISSUE    | ZONE | DESCRIPTION | DATE | REVISER |



# NOTES:

- (一) CARTON 材質為AB楞五層破裂強度 200lb/in<sup>2</sup> (標註尺寸為箱內尺寸). 裝箱數量共三層60PCS. (一層為20PCS)
  - (二) GIFT BOX 材質為E浪. (標註為箱外尺寸)
  - (三) 天地板二片 (尺寸: 520x330). 材質為AB楞五層破裂強度200lb/in. (上, 下個放一片)
  - (四) 注意浪紋方向.
- PS: 需廠商提供打樣sample 組裝 ok, 始能生產.

| Item                      | Dimension | 0~20  | ~100  | ~250 | ~600 | 800~ |  | MODEL NO. | PARTS NO. | DWG. DATE                                                                             | MATERIAL  | PARTS NAME |             |  |       |
|---------------------------|-----------|-------|-------|------|------|------|--------------------------------------------------------------------------------------|-----------|-----------|---------------------------------------------------------------------------------------|-----------|------------|-------------|--|-------|
| center distance (metal)   |           | ±0.1  | ±0.15 | ±0.2 | ±0.3 | ±0.5 |                                                                                      |           | SEE ABOVE | 02/05/99                                                                              | /         | PACKING    |             |  |       |
| center distance (resin)   |           | ±0.15 | ±0.25 | ±0.4 | ±0.5 | ±0.7 | DESIGN                                                                               | CHECKED   | P/M       | APPROVED                                                                              | REV. DATE | FILE NO.   | DRAWING NO. |  | UNIT  |
| general dimension (metal) |           | ±0.15 | ±0.25 | ±0.4 | ±0.5 | ±0.7 | David                                                                                | 陳錦文       |           |  |           |            | FO-S99023B  |  | SCALE |
| general dimension (resin) |           | ±0.15 | ±0.3  | ±0.5 | ±0.8 | ±1.0 |                                                                                      |           |           |                                                                                       |           |            |             |  | SIZE  |
|                           |           | 1     | 2     | 3    | 4    |      | 5                                                                                    | 6         |           | 7/6/99                                                                                | 9         | 10         | 11          |  | REV   |