



# Power Supply TT/Mega STE

PHIHONG ENTERPRISE CO., LTD.  
SWITCHING POWER SUPPLY  
SPECIFICATION

MODEL: PSM-5341  
DWG NO: PES10442  
PART NO: C301379-001

ISSUED: 03-10-90  
REV A : 09-20-90

1. Input

- 1.1 AC Input voltage: 100-240 VAC (Universall)
- 1.2 AC Input frequency: 50 Hz to 60 Hz
- 1.3 Ac Input current: 2 A (RMS) for 120 VAC  
1 A (RMS) for 240 VAC
- 1.4 Max. In-rush current: 20 A for 120 VAC  
40 A for 240 VAC

2. Output

|                        | Output1   | Output2  | Output3  | Output4  |
|------------------------|-----------|----------|----------|----------|
| 2.1 O/P voltage:       | +5 VDC    | +12 VDC  | -12 VDC  | -5 VDC   |
| 2.2 Min load current:  | 2 A       | 0.2A     | 0 A      | 0 A      |
| 2.3 Max load current:  | 7 A       | 2 A      | 0.3A     | 0.4A     |
| *2.4 Total regulation: | +5%-4%    | +5%      | +10%     | +5%      |
| 2.5 Ripple and noise:  | 100 mVp-p | 120mVp-p | 120mVp-p | 120mVp-p |

\* Peak current: 1) +12V 2.5A for 10 seconds max on power up.  
2) All other output are full load.

3. Overall Performance

- 3.1 Total output power: 64.6W
- 3.2 Efficiency: 65% typical at full load at input 240VAC.
- \*3.3 Power up time: 5 sec for all output voltages to be within regulation limit.
- 3.4 Hold up time: 10 mSec at max load and input 120VAC
- 3.5 Power good signal: The power good signal will come on at least 100ms after all voltage are good, but not longer than 500 ms after that point.



3.6 Power fail: TTL compatible output signal to go low at least 1mS before +5V below 4.8V.

3.7 Switching frequency: 50 KHz typical.

3.8 Temperature coefficient:  $\pm 0.05\%$  per  $^{\circ}\text{C}$ .

#### 4. Features

4.1 Over current protection: All output equipped with short circuit protection.

\*If any output becomes overloaded, the power supply should switch off within 20 mSec. an overcurrent condition will not damage power supply.

4.2 Over shoot: (5% of the nominal output voltage) at turn on and off, outputs shall not exceed the limit.

#### 5. Environmental

5.1 Operating temperature:  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ .

5.2 Cooling: air force convection.

5.3 Humidity: 90% RH.

5.4 Storage Temperature:  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .

5.5 Storage Humidity: 90% RH.

#### 6. Safety standard

6.1 Designed to meet the

Standards of: UL 478, 1012 CSA 22.2, 154 VDE 0806

#### 7. EMI standards

7.1 Meets the conduction limits of:

- (a) FCC part 15 class B rules.
- (b) VDE 0871 6.78 class B.

#### 8. Dielectric withstand (HIPOT) test

8.1 Input to output: 1800 VAC 20mA 1 SEC.

#### 9. Insulation resistance

9.1 Input to output: 7 Mohm min.

9.2 Input to ground: 7 Mohm min.



10. Reliability

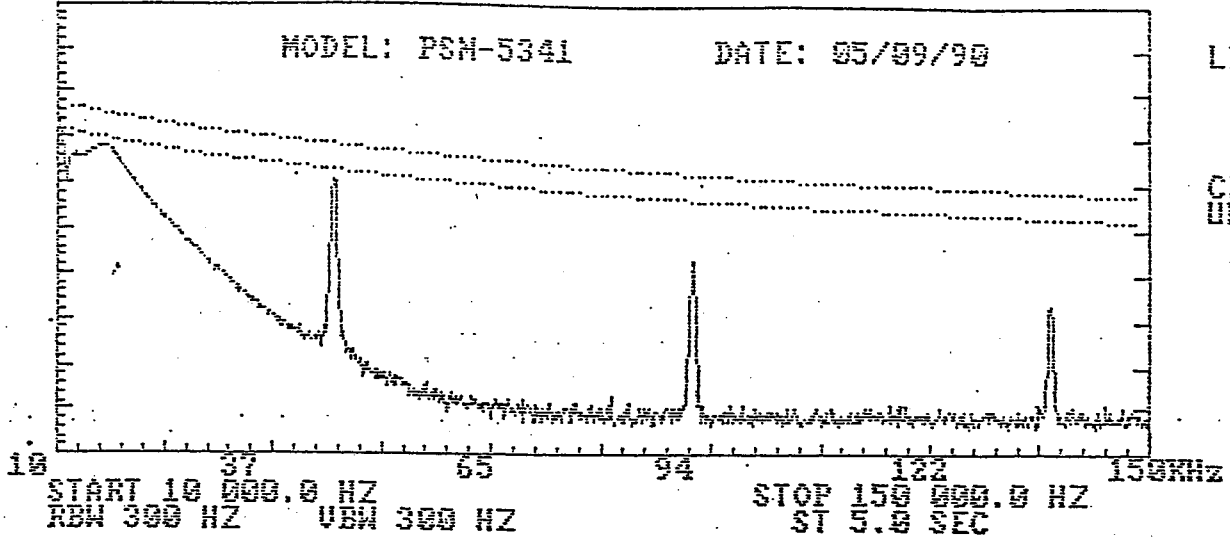
10.1 Mean time between failure: 20K hrs.min. at full load for a  
25°C ambient temperature.

3 of 3 / 442

REF -7.0 DBM  
10 DB/DIV

RANGE -10.0 DBM

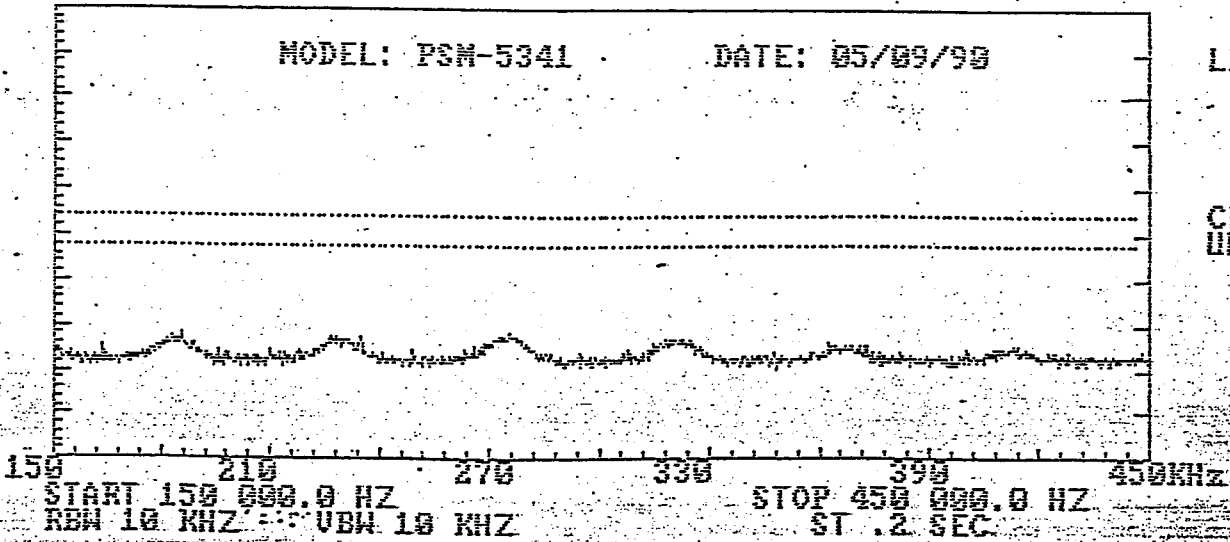
SPECTRUM ANALYZER  
HP-3585A 20Hz-40MHz



REF -7.0 DBM  
10 DB/DIV

RANGE -10.0 DBM

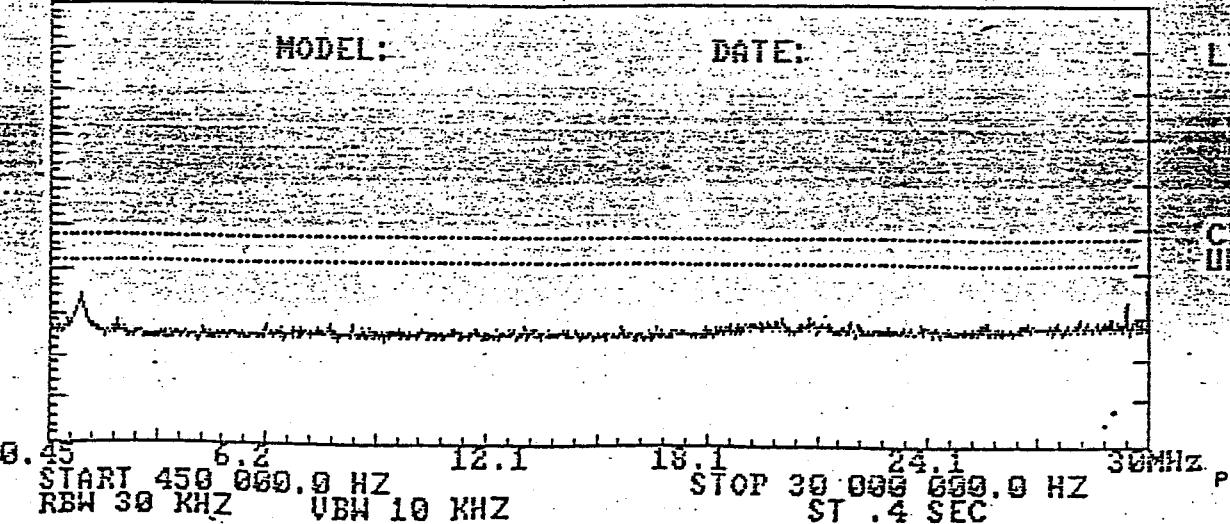
SPECTRUM ANALYZER  
HP-3585A 20Hz-40MHz



REF -7.0 DBM  
10 DB/DIV

RANGE -10.0 DBM

SPECTRUM ANALYZER  
HP-3585A 20Hz-40MHz



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Nur gültig mit umseitigen Bedingungen

# Zertifikat / Genehmigung

Nr.: R9052605

Genehmigungsinhaber: Phihong Enterprise Co., Ltd., No. 16, Lane 530, Chung Cheng N. Rd. Sanchung City, Taipei Hsien 24103, Taiwan, R.O.C.

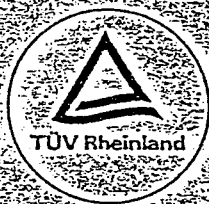
Fertigungsstätte: Phihong Enterprise Co., Ltd., No. 16, Lane 530, Chung Cheng N. Rd. Sanchung City, Taipei Hsien 24103, Taiwan, R.O.C.

Dikat-Zeichen des Antragstellers  
S00904

Aktenzeichen  
946-RF/RKM-E9052604E01

Ausstellungsdatum  
01.10.1990

Prüfzeichen:



Beschreibung: Geprüft nach EN 60 950 : 1988

Jahres-entgelte-Einheiten

10

Einbau-Schaltnetzteil (Switching Power Supply)

Bezeichnung : PSM-5341 *for JT, Mega STE*

Nennspannung : AC 100-240V, 50-60Hz

Nennstrom : 2A

Ausgangsspannungen : DC 5V 12V -5V -12V

Ausgangsströme : 7A 2A 0,4A 0,3A

max. Umgebungstemperatur : 50°C

Verschmutzungsgrad : 2

Schutzklasse : I

Weitere Angaben siehe Anlage (Aufbau-Übersicht) 1

10

Das Prüfmuster wird (Zutreffendes ist angekreuzt)

|                                     |
|-------------------------------------|
| <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> |

von der Prüfstelle in Verwahr genommen  
vom Genehmigungsinhaber zur Verfügung des TÜV Rheinland aufbewahrt

Besondere Vermerke: Der Einbau des Schaltnetzteiltes muß entsprechend der zugehörigen Einbauanweisung des Herstellers erfolgen. Primär- und Sekundärkreise sind durch verstärkte Isolation getrennt.

TUV Rheinland  
Prüfstelle für Gerätesicherheit  
Am Grauen Stein, D-5000 Köln 91, (Poll)



*Handwritten signature*

*Handwritten signature*



**PHIHONG ENTERPRISE CO., LTD.**  
 16, LANE 530, CHUNG CHENG N. RD., SANCHUNG CITY,  
 TAIPEI, TAIWAN 24103, R. O. C.  
 FAX: 886-2-9817086, 886-2-9833222  
 TELEX: 31182 PHIHONG  
 TEL: (02) 988-2126-0, 980-5255-9

**fax message**

| DATE         | REF NO.    | TO    | TOTAL NUMBER OF PAGE |
|--------------|------------|-------|----------------------|
| NOV 01, 1990 | F-0-11-013 | ATARI | 1/1                  |

FAX NO. 002-49-6142-209180

ATTN: J. PETER HENSELEIT, ATARI GERMANY  
 FROM: P.S. CHANG / TONY SUN, PHIHONG  
 SUBJ: PHIHONG PSM-5341 (ORIGINAL PSM-534)

*S-PSU*

*TT / Mega*

- FOR YOUR INFORMATION, THE PSM-534 MODEL NO. HAVE BEEN CHANGED TO PSM-5341, ATARI PART NO. C302074-001.
- FOLLOWING DOCUMENT WILL BE SENT TO YOUR ATTN VIA EXPRESS MAIL, EXPECT TO RECEIVE WITHIN FEW DAYS.
  - A. PSM-5341 DETAILS SPEC.
  - B. COSMATICS DRAWING.
  - C. CIRCUIT SCHEMATICS.
  - D. TUV APPROVE SHEET.

PLS ADVISE ANYTHING ELSE WE CAN DO FOR YOU UPON RECEIPT.
- THE UNIT LABEL SHOWS 100-240 VAC WORKING VOLTAGE, THAT IS ONLY FOR END USER'S REFERENCE. IN FACT, ACCORDING TO OUR TEST SPEC. (INSIDE THE FACTORY) IT SHOULD BE OPERATED FROM 90 VAC TO 260 VAC, THEREFORE, TO OPERATE AT 90 VAC (EVEN LOWR) WILL BE NO PROBLEM AT ALL, WE HV CONFIDENT ON OUR QUALITY.

BEST REGARDS,

P.S. CHANG / TONY SUN

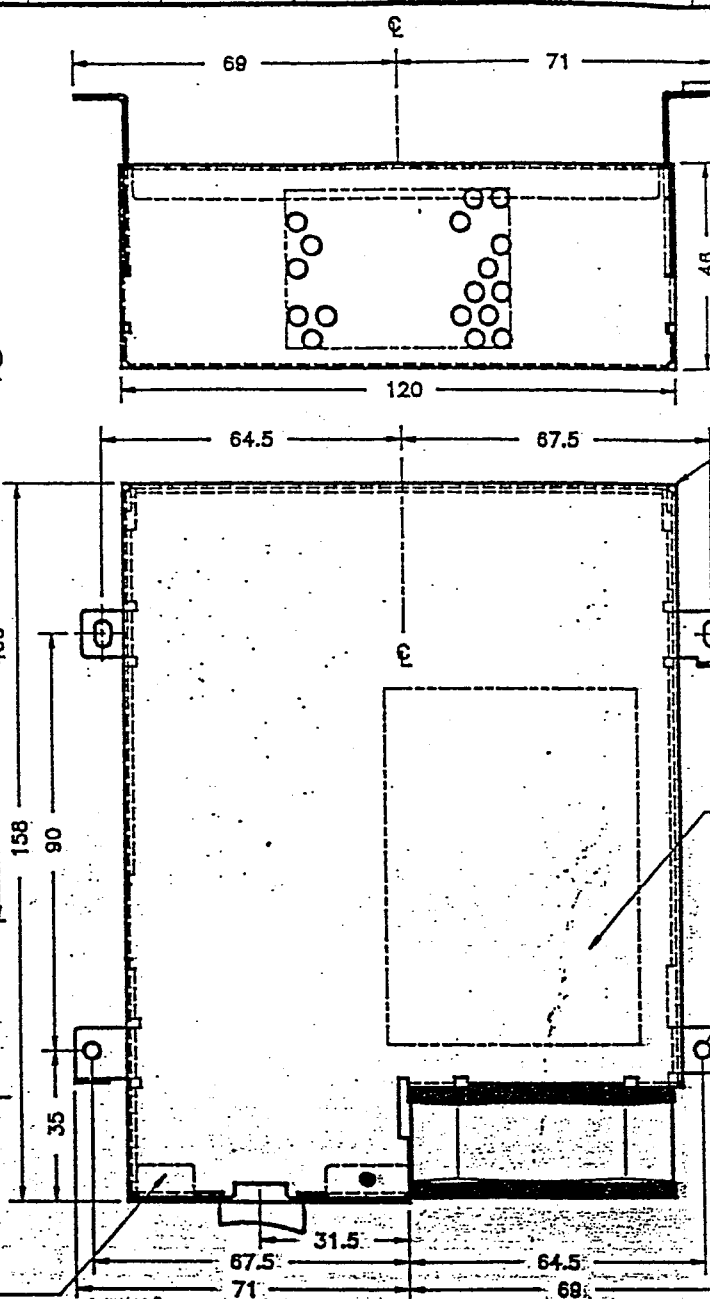
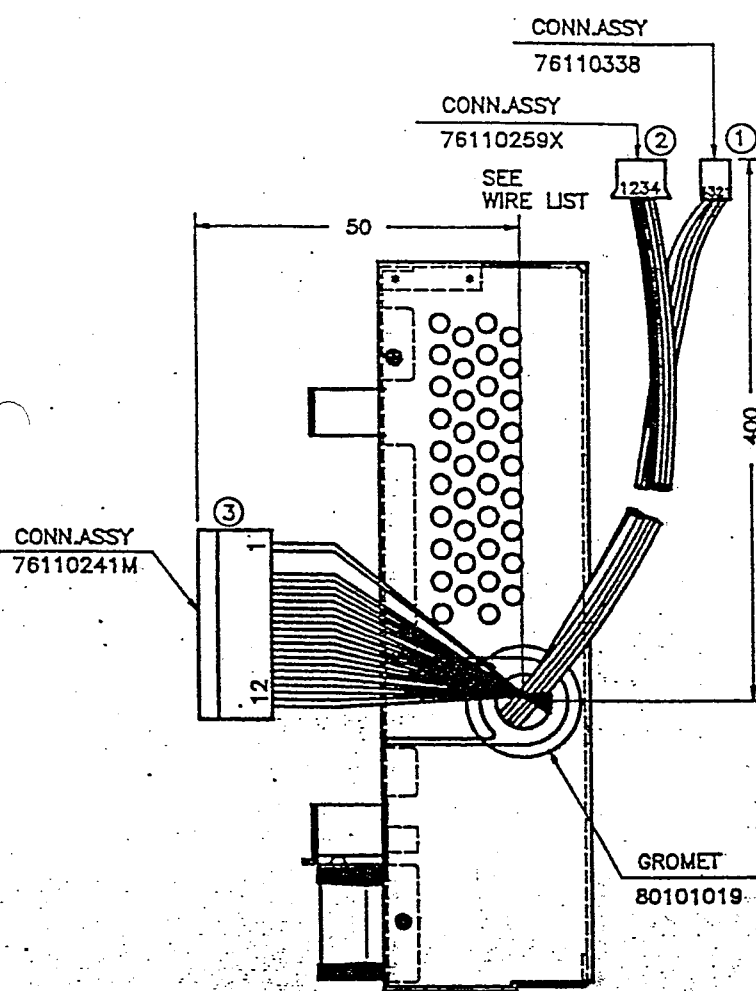
*Tony*

THE MESSAGE YOU A VERY NICE DAY!!

99: 8 2:000 MK-919 211mm X 797mm

*61a*

1 2 3 4 5 6 7 8 9 10 11



① WIRE LIST

| PIN | COLOR  | AWG | OUTPUT |
|-----|--------|-----|--------|
| 1   | YELLOW | 28  | +12V   |
| 2   | BLACK  | 28  | GND    |
| 3   | BLACK  | 28  | GND    |
| 4   | RED    | 28  | +5V    |

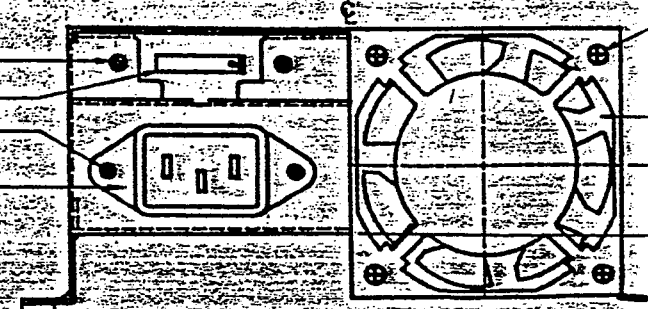
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| PIN | COLOR  | AWG | OUTPUT |
|-----|--------|-----|--------|
| 1   | YELLOW | 18  | +12V   |
| 2   | BLACK  | 18  | GND    |
| 3   | BLACK  | 18  | GND    |
| 4   | RED    | 18  | +5V    |

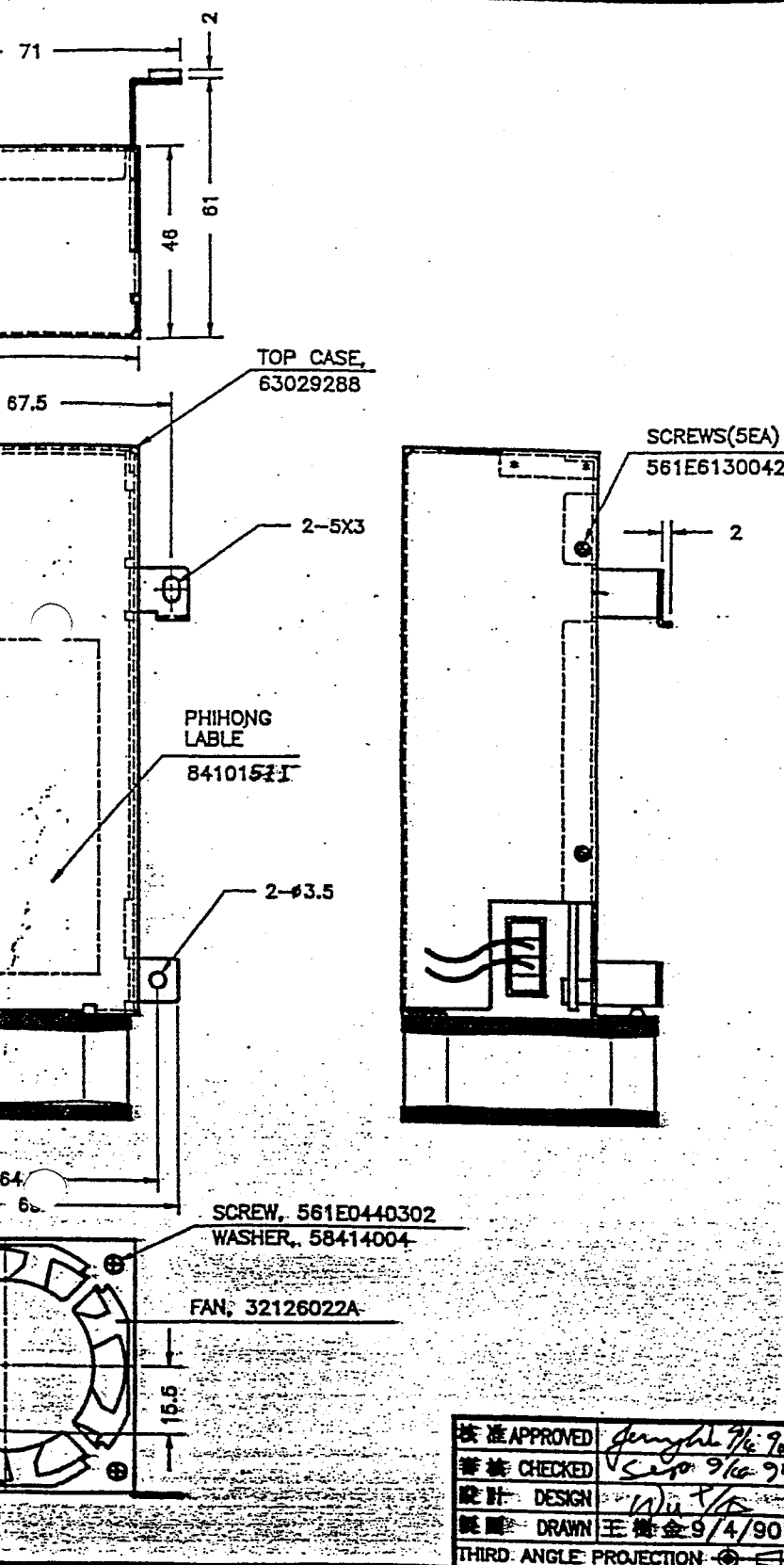
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| PIN | COLOR  | AWG | OUTPUT     |
|-----|--------|-----|------------|
| 1   | ORANGE | 18  | POWER GOOD |
| 2   | GREEN  | 18  | +12V       |
| 3   | YELLOW | 18  | +12V       |
| 4   | BLACK  | 18  | GND        |
| 5   | BLACK  | 18  | GND        |
| 6   | BLACK  | 18  | GND        |
| 7   | BLACK  | 18  | GND        |
| 8   | BLACK  | 18  | GND        |
| 9   | BLACK  | 18  | GND        |
| 10  | BLACK  | 18  | GND        |
| 11  | RED    | 18  | +5V        |
| 12  | RED    | 18  | +5V        |
| 13  | RED    | 18  | +5V        |
| 14  | RED    | 18  | +5V        |

- BOT CASE 63029289A
- SCREW 56110430062
- SWITCH 24130031
- SCREW 561C0330082
- INLET 30206013



9/6-90



修正 REVISIONS  
CHECK & ISSUE 9/4/90

說明 GENERAL NOTES

| 長度單位<br>DIMENSION | 容許公差單位(MM)<br>DIMENSION TOLERANCE |      |      |      |
|-------------------|-----------------------------------|------|------|------|
| 尺寸 & 公差           | A                                 | B    | C    | D    |
| ±0.1              | ±0.1                              | ±0.1 | ±0.1 | ±0.1 |
| ±0.2              | ±0.2                              | ±0.2 | ±0.2 | ±0.2 |
| ±0.3              | ±0.3                              | ±0.3 | ±0.3 | ±0.3 |
| ±0.4              | ±0.4                              | ±0.4 | ±0.4 | ±0.4 |
| ±0.5              | ±0.5                              | ±0.5 | ±0.5 | ±0.5 |
| ±0.6              | ±0.6                              | ±0.6 | ±0.6 | ±0.6 |
| ±0.7              | ±0.7                              | ±0.7 | ±0.7 | ±0.7 |
| ±0.8              | ±0.8                              | ±0.8 | ±0.8 | ±0.8 |
| ±0.9              | ±0.9                              | ±0.9 | ±0.9 | ±0.9 |
| ±1.0              | ±1.0                              | ±1.0 | ±1.0 | ±1.0 |

**飛宏企業股份有限公司**  
PHIHONG ENTERPRISE CO., LTD.

機種 MODEL: PSM-5341

材質 MATERIAL: SECC

處理 TREATMENT: 材質本色(灰色)

公差 TOLERANCE: B

圖名 DESCRIPTION: MODEL OUTLINE DIAGRAM

比例 SCALE: X

單位 UNIT: MM

圖號 DRAWN: PES00234 A

日期 DATE: 9/4/90

|                        |                      |
|------------------------|----------------------|
| 核准 APPROVED            | <i>Jungbl 9/6/90</i> |
| 審核 CHECKED             | <i>Sepo 9/6/90</i>   |
| 設計 DESIGN              | <i>Wu T/A</i>        |
| 製圖 DRAWN               | 王樹金 9/4/90           |
| THIRD ANGLE PROJECTION |                      |





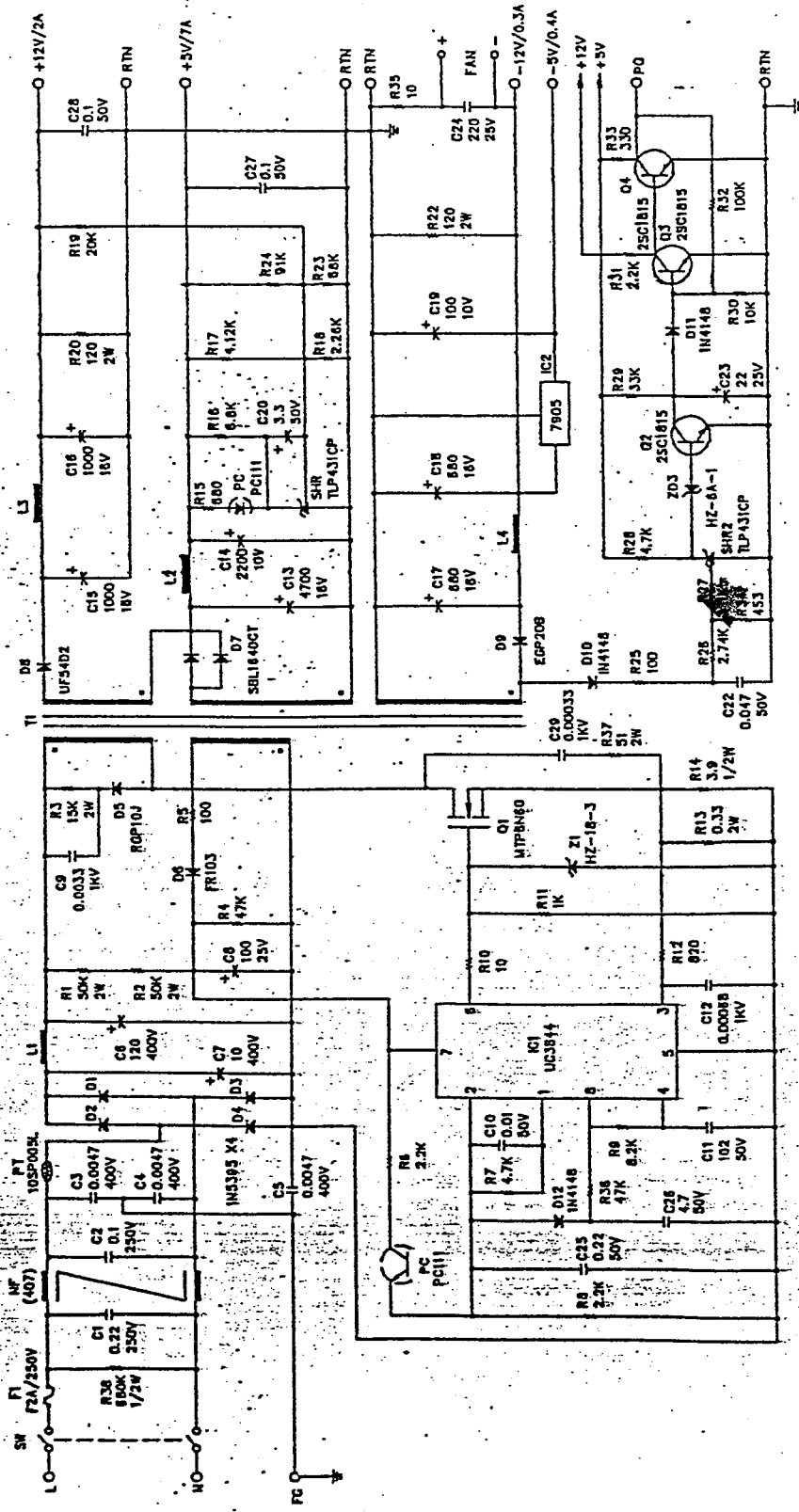
飛宏企業股份有限公司  
PIH-HONG ENTERPRISE CO., LTD.

REVISIONS

01. PRELIMINARY 78.9.8

\* FACTORY ALIGNMENT

|                  |     |     |
|------------------|-----|-----|
| 220VAC MIN. LOAD | R23 | R24 |
| +5V REGULATION   | ✓   | ✓   |
| 5V - 5.15V       | ✓   | X   |
| < 8 V            | ✓   | X   |
| > 5.18V          | X   | ✓   |



GENERAL NOTES

1. ALL RESISTORS ARE 1/8W UNLESS OTHERWISE INDICATED.
2. ALL RESISTORS ARE IN OHM AND CAPACITORS ARE IN UF UNLESS OTHERWISE INDICATED.

SCHEMATIC

|             |                 |
|-------------|-----------------|
| MODEL       | PSM-5341        |
| DRAWN       | AMY CHEN 78.9.6 |
| DESIGN      | John P. b       |
| SAFETY      |                 |
| CHECKED     | Sam O. b        |
| APPROVED    | de w. b. 7      |
| DRAWING NO. |                 |
| REV.        | 01              |

10 9 8 7 6 5 4 3 2 1

Y B D C W L G H