

SPECIFICATION FOR APPROVAL

承 認 書

| | | | | |
|-------------|--|------------|-----|-----|
| 客 戶 承 認 印 章 | | 龍呈國際科技有限公司 | | |
| | | 業 務 | 工 程 | 品 管 |

客 戶 智 邦 科 技 股 份 有 限 公 司

CUSTOMER _____

品 名 DB B-SMA Paddle Ant. GEC6200 Black UL2043

SPECIES GE-C6200

料 號 FDP-ACBSMA-BG

PART NO. _____

客 戶 料 號

CUSTOMER PART NO. _____

龍呈國際科技有限公司

Long Cheng Tech. Int'l Co., Ltd.

新竹縣竹北市中和街 62 巷 15 弄 3 號 3 樓

3Floor, No.3, Alley 15, Lane 62, Chung Ho St.,

Chu-Pei City, Hsin Chu, Taiwan, R.O.C

TEL: 03-5541117 FAX: 03-5541065

Long Cheng Tech. Int'l Co., Ltd.

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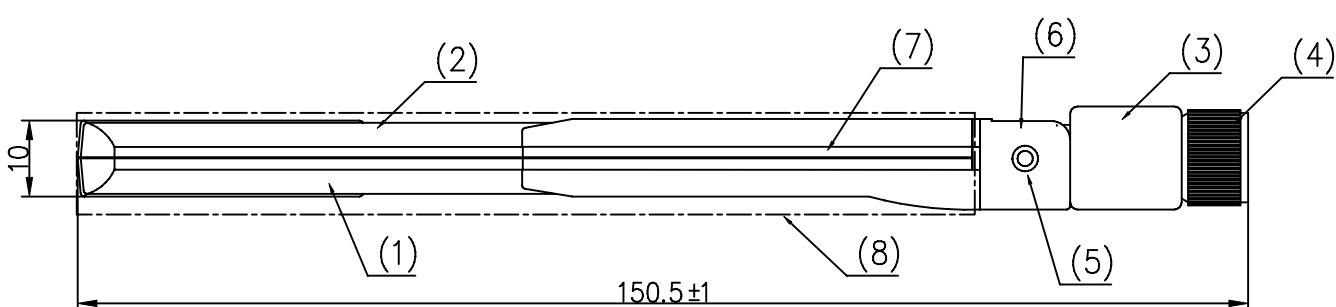
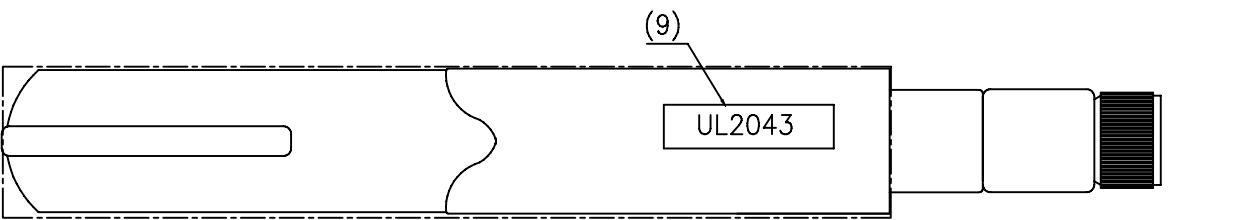
3Floor, No.3, Alley 15, Lane 62, Chung Ho St.,

Chu-Pei City, Hsin Chu, Taiwan, R.O.C

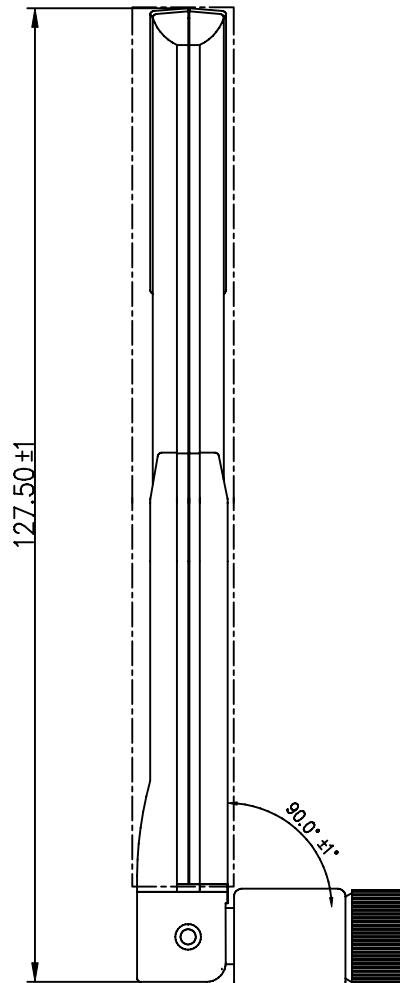
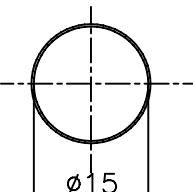
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| ltr | Zone | REVISION RECORD / Description | | | | DWN | CHK | DATE | ltr | Zone | REVISION RECORD / Description | | | | DWN | CHK | DATE | DRAWING NUMBER | | |
|-----|------|-------------------------------|--|--|--|-----|-----|-----------|-----|------|-------------------------------|--|--|--|-----|-----|------|----------------|--|--|
| 1 | | New Release | | | | | | Nov/25/05 | | | | | | | | | | FDP-ACBSMA-BG | | |
| F | | | | | | | | | | | | | | | | | | F | | |



PVC TUBE 透明
115 REF(±5)



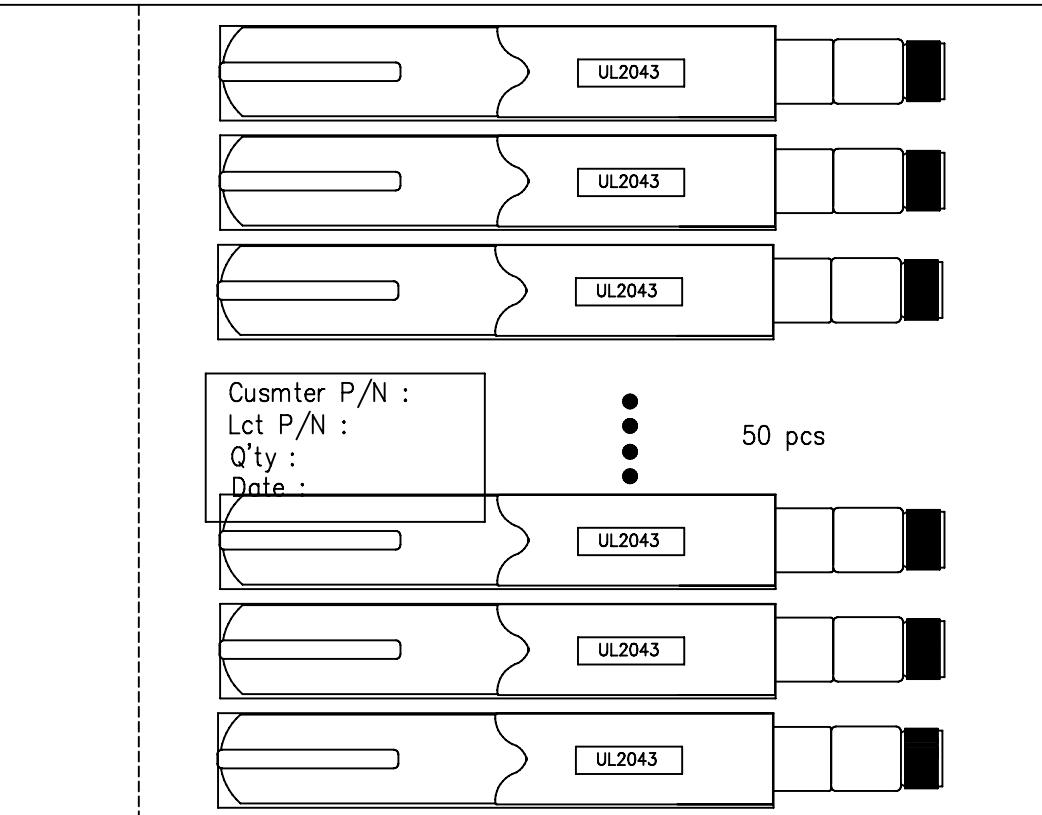
| NO | DESCRIPTION | Q'ty | MATERIAL | Part Number |
|----|-------------------------------|------|-----------------|----------------|
| 9 | Label (銅版紙)12mm*4mm | 1 | | M12-012X048-WH |
| 8 | PVC TUBE Ø15*L115mm T0.3 | 1 | | M05-PVCD15-00 |
| 7 | DB RO PCB 104*16.05 | 1 | | M03-DUBAND-00 |
| 6 | CABLE : Ø1.37 Black | 1 | | M02-137GRR-BL |
| 5 | RIVET : Zn Surface | 2 | Stainless | M06-202040-00 |
| 4 | CN B-SMA M/F RG178 ZLA-7013RP | 1 | Brass Cr plated | M01-053020-02 |
| 3 | PL 3BAND-S LO-HOLD B for SMA | 1 | ABS | M04-3BS030-01 |
| 2 | UPPER:GE-C6200 (Black) | 1 | GE6200 ABS+PC | M04-ASGEBL-03 |
| 1 | COVER Base:GE6200 (Black) | 1 | GE6200 ABS+PC | M04-ASGEBL-13 |

| UNIT | APVD | DESCRIPTION: DB B-SMA(M/F) PADDLE ANT. GE-C6200 Black | | |
|----------|------|---|-------|--------|
| MATERIAL | CHK | DIMENSION: 1 PLC ±0.5 2 PLC ±0.3 3 PLC ±0.2 | | |
| SEE NOTE | | PART NUMBER FDP-ACBSMA-BG REV 1 | | |
| FINISH | DWN | SIZE | SCALE | Sheet |
| SEE NOTE | KIKI | A4 | 1/1 | 1 OF 1 |



LONG CHENG ELECTRONICS CO. LTD
龍呈國際科技有限公司

| ltr | Zone | REVISION RECORD / Description | | | DWN | CHK | DATE | ltr | Zone | REVISION RECORD / Description | | | DWN | CHK | DATE | DRAWING NUMBER | | |
|-----|------|-------------------------------|--|--|-----|-----|------------|-----|------|-------------------------------|--|--|-----|-----|------|----------------|---------------|---|
| 1 | | New Release | | | | | Nov/21/05* | | | | | | | | | | S-SMA Package | |
| 2 | | | | | | | | | | | | | | | | | | |
| F | | | | | | | | | | | | | | | | | | F |



1 PE Bag = 50 pcs

1 Carton = 20 PE BAG =1000 pcs

| | | | | |
|----|-------------|------|----------|-------------|
| 9 | | | | |
| 8 | | | | |
| 7 | | | | |
| 6 | | | | |
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | | | | |
| 1 | | | | |
| NO | DESCRIPTION | Q'ty | MATERIAL | Part Number |

UNIT
mm
APVD

MATERIAL
SEE NOTE
CHK

FINISH
SEE NOTE
DWN
Kaven



LONG CHENG ELECTRONICS CO. LTD

龍呈國際科技有限公司

DESCRIPTION:

B-SMA Package

DIMENSION:

| | | | | | |
|--------|---------------|-------------|--------------|-------|--------|
| 1 PLC | ± 0.5 | PART NUMBER | XXXXXXXXXXXX | REV | 1 |
| 2 PLC | ± 0.3 | | | | |
| 3 PLC | ± 0.2 | | | | |
| ANGLES | $\pm 5^\circ$ | SIZE | A4 | SCALE | 1/1 |
| | | SHEET | | | 1 OF 1 |

機 械 特 性 規 格

Mechanical Specifications

接頭種類
(Connector Type)

RP-SMA Plug (BSMA) Cr plated

塑膠顏色
(Plastic Color)

Black

同軸線材
(Coaxial Cable Type)

1.37

同軸線材規格
(Coaxial Cable Spec.)

See attached file Cable Spec

天線罩材質
(Radom Material)

ABS+PC GE-C6200

同軸線材顏色
(Coaxial Cable Color)

Black

輻射材料
(Radiator Material)

PCB (Arlon/Rogers)

工作溫度與溼度
(Working Temperature & Humidity)

**-25°C - +75°C
90% @ 25°C**

重 量
(Weight)

27.5g Max.

電氣特性規格

Electrical Specifications

頻率範圍
(Frequency Range)

2.4GHz~2.5GHz/5.15GHz~5.875GHz

增益
(Gain)

2.4~2.5 GHz, Gain = 2dBi
5.15 ~ 5.875 GHz, Gain = 5dBi

電壓駐波比
(VSWR)

VSWR < 2

極化
(Polarization)

Linear, Vertical

半功率水平波束寬
(HPBW/Horizontal)

360°

半功率垂直波束寬
(HPBW/Vertical)

78°

最大功率
(Max. Power Rating)

2 W (CW)

阻抗匹配
(Impedance)

50 Ohms (typical)

電 氣 特 性 測 試

Electrical Specifications Test

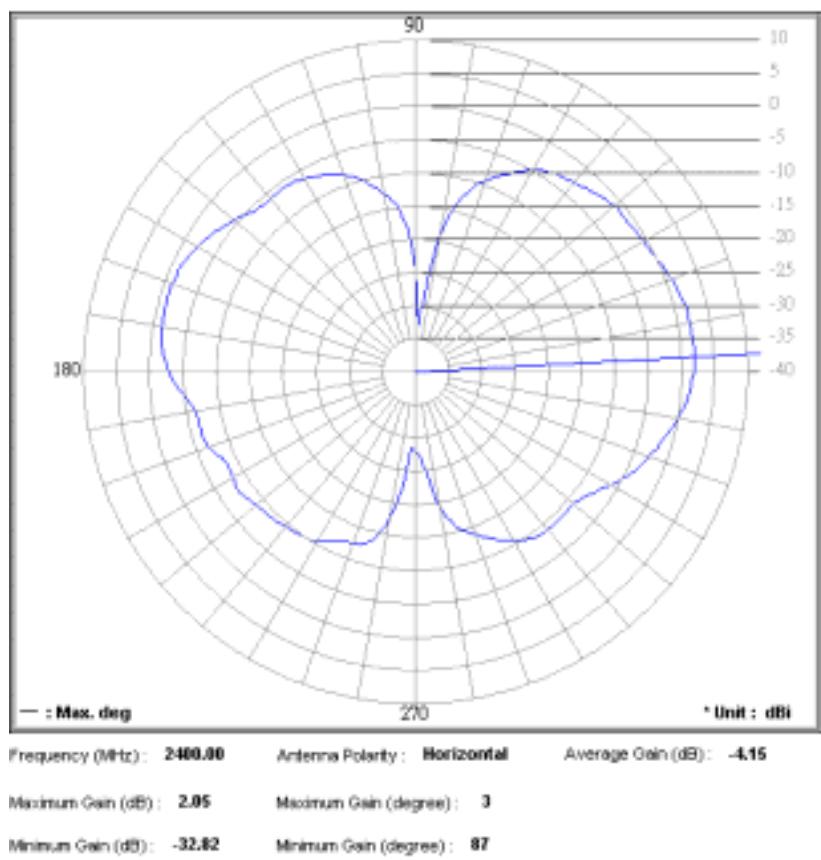
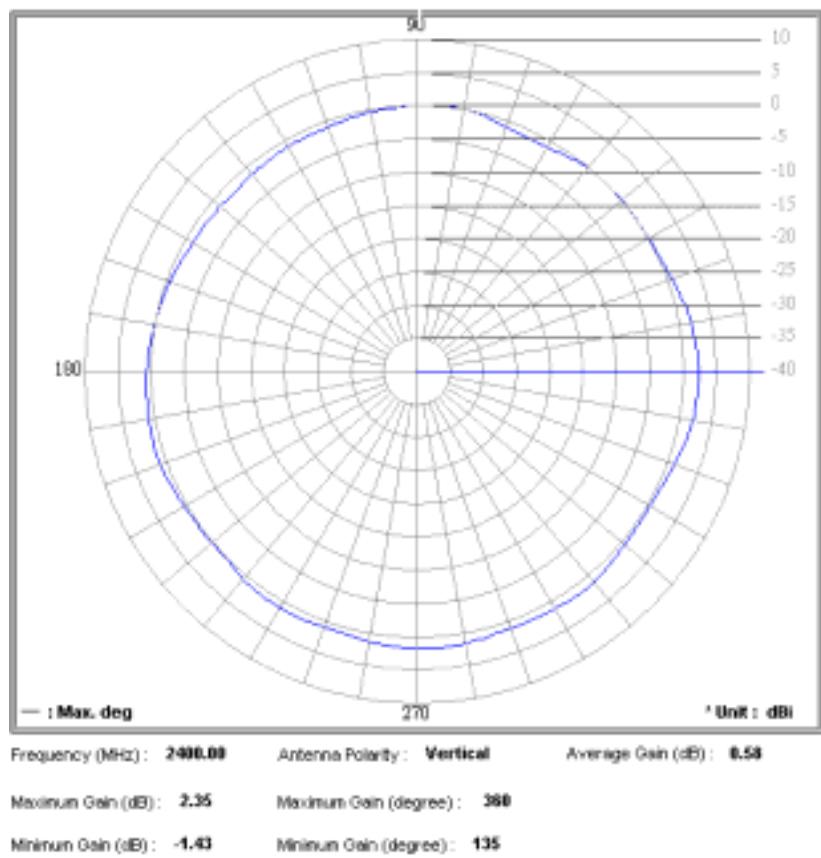
電 壓 駐 波 比 測 試
(VSWR Test)

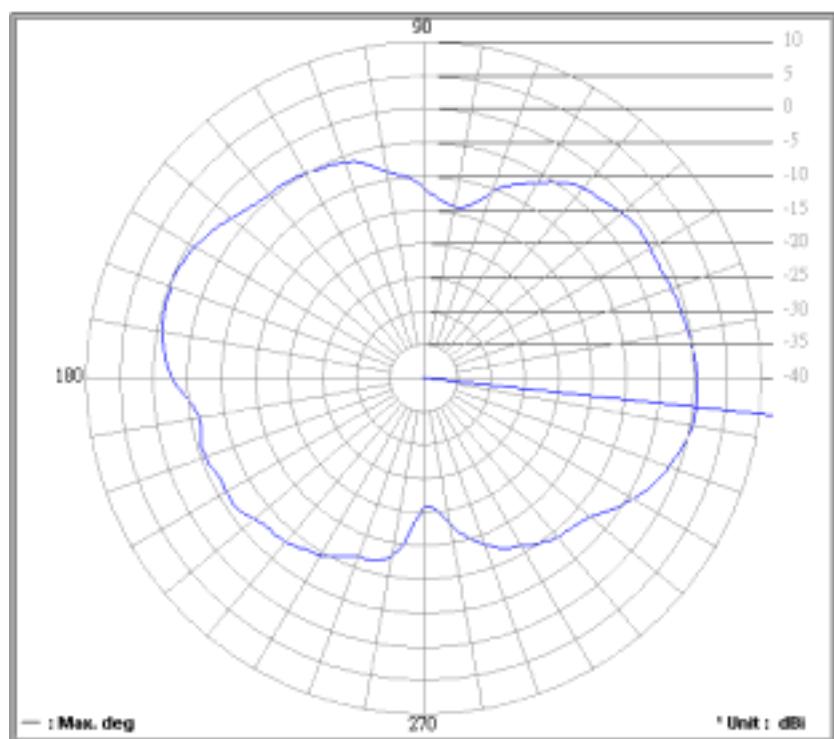
測 試 使 用 儀 器
(Test Instrument)

Anritsu MS4653B Vector Network Measurement System

測 試 資 料
(Test Result)

** 如下頁附圖所示

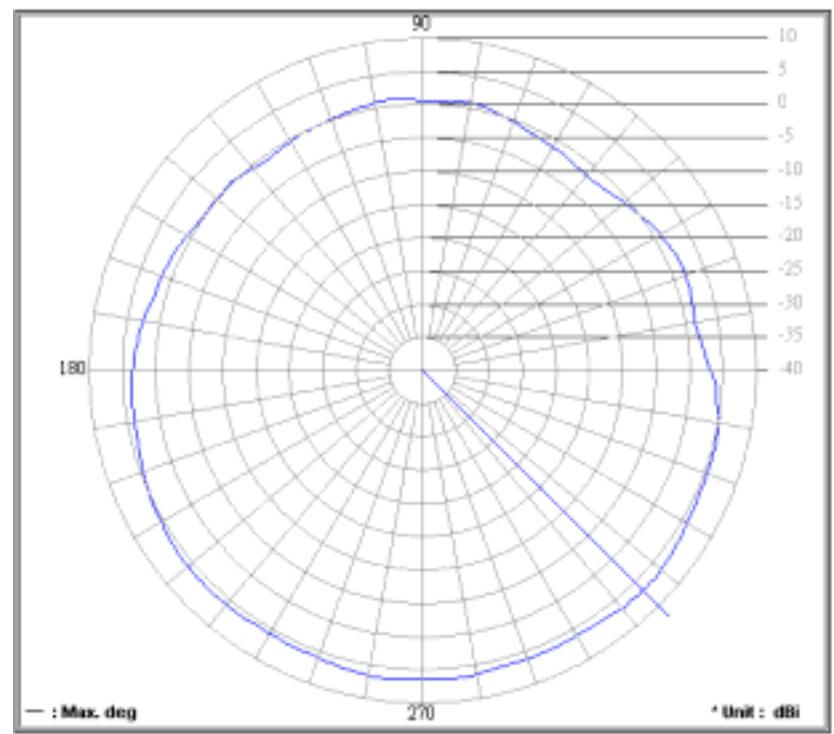




Frequency (MHz): **2400.00** Antenna Polarity: **Horizontal** Average Gain (dB): **-4.14**

Maximum Gain (dB): **0.65** Maximum Gain (degree): **354**

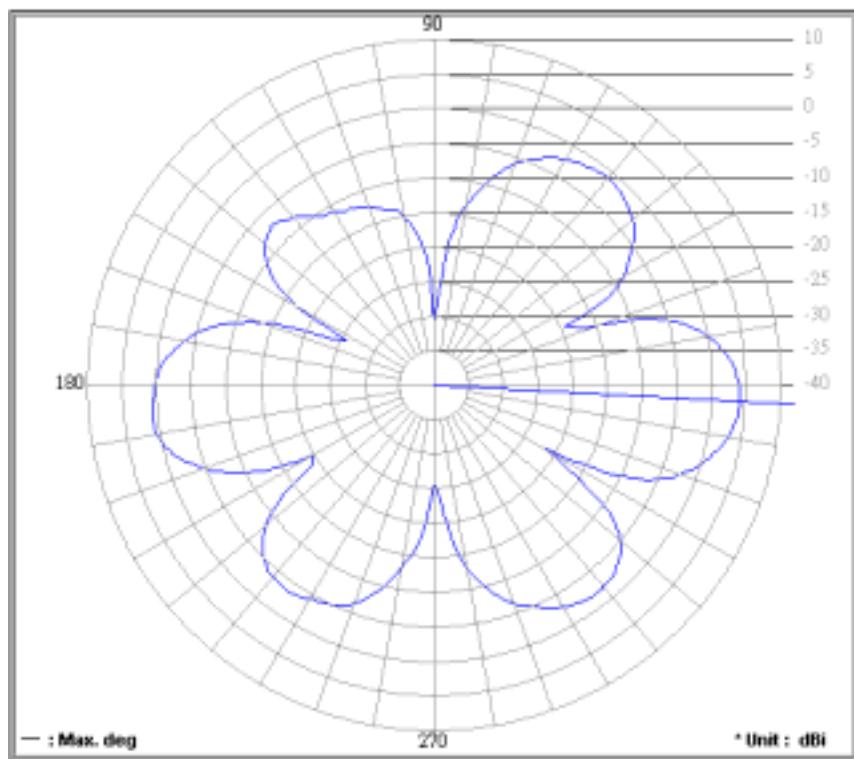
Minimum Gain (dB): **-26.88** Minimum Gain (degree): **279**



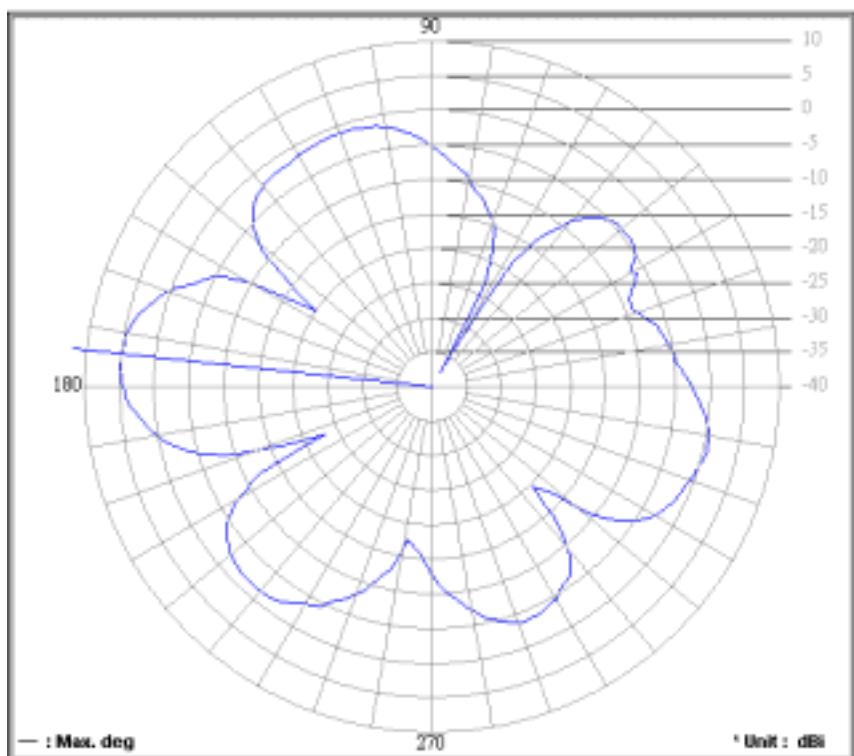
Frequency (MHz): **5150.00** Antenna Polarity: **Vertical** Average Gain (dB): **3.91**

Maximum Gain (dB): **6.72** Maximum Gain (degree): **315**

Minimum Gain (dB): **-1.76** Minimum Gain (degree): **48**



Frequency (MHz) : **5150.00** Antenna Polarity : **Horizontal** Average Gain (dB) : **-3.81**
Maximum Gain (dB) : **4.11** Maximum Gain (degree) : **357**
Minimum Gain (dB) : **-31.34** Minimum Gain (degree) : **90**



Frequency (MHz) : **5150.00** Antenna Polarity : **Horizontal** Average Gain (dB) : **-2.83**
Maximum Gain (dB) : **4.95** Maximum Gain (degree) : **174**
Minimum Gain (dB) : **-37.51** Minimum Gain (degree) : **60**

Test Report

Date : 2004/NOV/5 Tester: Nick

Model / P/n : FDP-ACBSMA-BL

Description : Dual Band B-SMA Paddle Antenna Black

Return Loss Test / VSWR



Smith



BILL OF MATERIAL

| LEVEL | ITEM | GB P/N | SPECIFICATION | VENDER | QT'Y | MEMO |
|-------|------|----------------|--|---------|-------------|------|
| 1 | 10 | CW30039G054G | UUL 1354 80°C 30V COAXIAL CABLE 1. CONDUCTOR: 30AWGx1C, SILVER PLATED COPPER WIRE. 2. INSULATION: FEP, OD=0.92±0.02mm, SELF-COLOR. 3. SHIELD: BRAID (16/5/0.05) TINNED PLATED COPPER WIRE, COVERAGE 90% MIN. 4. JACKET: FEP, OD=1.37±0.05mm, COLOR: BLACK GB COLOR: 000 NO MARKING. | V-CN080 | 1mm | |
| 1 | 20 | W095095000AP | CARDBOARD. | V-CN080 | 0.000006pce | |
| 1 | 30 | Z100100100C00P | CARTON. | V-CN080 | 0.000001pce | |

ELECTRICAL CHARACTERISTICS

| ITEM | SPECIFICATION | MEMO | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|------------------------|--|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|---------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--|
| 1 | OPERATION TEMPERATURE: 80°C | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | ELECTRICAL PROPERTIES: 2-1. INSULATION RESISTANCE: DC/250V 1000Mohm.m MIN.. 2-2. VOLTAGE RATING: 30V. 2-3. WITHSTAND VOLTAGE: AC/500V RMS FOR ONE MINUTE. 2-4. CONDUCTOR RESISTANCE: LESS THAN 520ohm/KM(at 20°C) 2-5. CAPACITANCE: 97pF/M(NOMINAL) 2-6. IMPEDANCE: 50 ohm NOM @ TDR. 2-7: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">NOM. ATTENUATION(dB/M)</th> </tr> </thead> <tbody> <tr><td>0.1GHz</td><td>0.5</td></tr> <tr><td>0.4GHz</td><td>1.0</td></tr> <tr><td>0.8GHz</td><td>1.5</td></tr> <tr><td>1.0GHz</td><td>1.6</td></tr> <tr><td>1.5GHz</td><td>2.0</td></tr> <tr><td>1.9GHz</td><td>2.3</td></tr> <tr><td>2.4GHz</td><td>2.6</td></tr> <tr><td>2.45GHz</td><td>2.7</td></tr> <tr><td>3.0GHz</td><td>2.9</td></tr> <tr><td>5.2GHz</td><td>4.0</td></tr> <tr><td>5.8GHz</td><td>4.3</td></tr> <tr><td>6.0GHz</td><td>4.3</td></tr> </tbody> </table> | NOM. ATTENUATION(dB/M) | | 0.1GHz | 0.5 | 0.4GHz | 1.0 | 0.8GHz | 1.5 | 1.0GHz | 1.6 | 1.5GHz | 2.0 | 1.9GHz | 2.3 | 2.4GHz | 2.6 | 2.45GHz | 2.7 | 3.0GHz | 2.9 | 5.2GHz | 4.0 | 5.8GHz | 4.3 | 6.0GHz | 4.3 | |
| NOM. ATTENUATION(dB/M) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1GHz | 0.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.4GHz | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.8GHz | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0GHz | 1.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.5GHz | 2.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.9GHz | 2.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4GHz | 2.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.45GHz | 2.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.0GHz | 2.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.2GHz | 4.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.8GHz | 4.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0GHz | 4.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

MECHANICAL CHARACTERISTICS

| ITEM | SPECIFICATION | MEMO |
|------|---------------|------|
| | | |

NOTE

| ITEM | SPECIFICATION | MEMO |
|------|---------------|------|
| | | |

| | | | | |
|------------|-----------------|--|-------------|---------------------------------|
| DRAWN | DRAGON | GOLDEN BRIDGE ELECTECH INC. | DRAWING NO. | AS53-04080005-6 |
| ENGINEER | DUNNE | | REVISION | |
| CHECKED | WINCO | | UNIT | NONE |
| APPROVED | JEFF | | SCALE | NONE |
| SAMPLE NO. | AS53-04080005-6 | | PAGE NO. | 2 OF 2 |
| CUSTOMER: | 啓碁科技 | SPEC: ROUND CABLE | DATE | 2004.08.16 |
| P/N: | | | FILE: | R:\SP\SP04\AS53-04080005-6A.DOC |

| ISSUE | QT'Y | ECN NO. | REVISED DESCRIPTION | DATE | APPROVED |
|-------|------|---------|---------------------|------|----------|
| | | | | | |

UL 1354 COAXIAL CABLE

1. CONDUCTOR: 30AWGx1C, SILVER PLATED COPPER .
 2. INSULATION: FEP, $\phi 0.92 \pm 0.02$ mm, SELF-COLOR.
 3. SHIELD: BRAID (16/5/0.05) TINNED PLATED COPPER WIRE, COVERAGE 90% MIN.
 4. JACKET: FEP, $\phi 1.37 \pm 0.05$ mm, COLOR: BLACK, GB COLOR: 000, NO MARKING.

NOTE:

1. RATING TEMPERATURE: 80°C.

2. ELECTRICAL PROPERTIES:

2-1. INSULATION RESISTANCE: DC/250V 1000Mohm.m MIN..

2-2. VOLTAGE RATING : 30V.

2-3. WITHSTAND VOLTAGE: AC/500V RMS FOR ONE MINUTE.

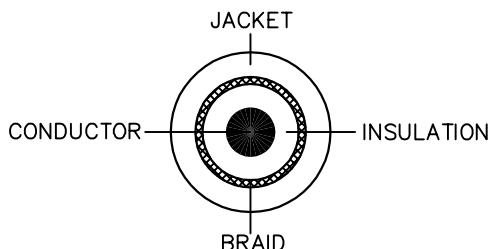
2-4. CONDUCTOR RESISTANCE: LESS THAN 330ohm/KM(at 20°C)

2-5. CAPACITANCE: 96pF/M(NOMINAL)

2-6. IMPEDANCE: 50ohm NOM@ TDR

| NOM. ATTENUATION(dB/M) | |
|------------------------|-----|
| 0.1GHz | 0.5 |
| 0.4GHz | 1.0 |
| 0.8GHz | 1.5 |
| 1.0GHz | 1.6 |
| 1.5GHz | 2.0 |
| 1.9GHz | 2.3 |
| 2.4GHz | 2.6 |
| 2.45GHz | 2.7 |
| 3.0GHz | 2.9 |
| 5.2GHz | 4.0 |
| 5.8GHz | 4.3 |
| 6.0GHz | 4.3 |

3. VENDOR: GOLDEN BRIDGE ELECTECH OR EQUIVALENT.



| SYMBOL | QT'Y | DESCRIPTION |
|-------------------------------------|------|-------------------------------|
| <input checked="" type="checkbox"/> | 0 | CRITICAL DIMENSION |
| <input type="checkbox"/> | 0 | MAJOR DIMENSION |
| DRAWING NO. | | CW30039G054G |
| REVISION | | |
| UNIT | | mm |
| SCALE | | 5:1 |
| PAGE NO. | | 1 OF 2 |
| DATE | | 2004.02.24 |
| FILES: | | R:\SAMPLE\c\cw30039g054g1.dwg |

DRAWN DRAGON

GOLDEN BRIDGE ELECTECH
INC.

ENGINEER DUNNE

CHECKED WINCO

APPROVED JEFF

TITLE: MINI COAXIAL

GENERAL TOLERANCE:
 >0.5~3= ± 0.1 >30~120= ± 0.3
 >3~6= ± 0.1 >120~315= ± 0.5
 >6~30= ± 0.2 ANGLER= $\pm 1^\circ$

DESC: 30AWGx1C

SPEC: FEP, BLACK
 $\phi 1.37$ mm, L=...



Test Report

GOLDEN BRIDGE ELECTECH INC.
3F., NO.6, LANE 270, SEC.3, PEI SHEN RD., SHEN
KENG, TAIPEI, TAIWAN, R.O.C.

Report No : CE/2004/31925
Date : 2004/03/24
Page : 1 of 1

The following merchandise was(were) submitted and identified by the client as :

Type of Product : MINI RF CABLE
Style/Item No : COAXIAL CABLE
Sample Received : 2004/03/17.
Testing Date : 2004/03/17 TO 2004/03/24

Test Result

PART NAME NO.1 : BLACK PLASTIC JACKET
 PART NAME NO.2 : GRAY PLASTIC JACKET
 PART NAME NO.3 : WHITE PLASTIC JACKET
 PART NAME NO.4 : TRANSPARENT PLASTIC INSULATION

| Test Item(s): | Unit | Method | MDL | Result | | | |
|---|------|--|--------|--------|------|------|------|
| | | | | NO.1 | NO.2 | NO.3 | NO.4 |
| PBBs(Polybrominated biphenyls)(CAS NO:67774-32-7) | % | With reference to 83/264/EEC. Analysis was performed by GC/MS. | 0.0005 | N.D. | N.D. | N.D. | N.D. |
| PBDEs(Polybrominated biphenyl ethers) | % | With reference to 83/264/EEC. Analysis was performed by GC/MS. | 0.0005 | N.D. | N.D. | N.D. | N.D. |

NOTE: (1) N.D. = Not detected.(<MDL)
 (2) ppm = mg/kg
 (3) MDL= Method Detection Limit
 (4) " ---" = Not Applicable
 (5) " -" = Not Regulation
 (6) * = Results shown are of the adjusted analytical results.
 (7) **= Qualitative analysis(No Unit)
 (8) Negative = Undetectable / Positive = Detectable.

Dennis Yen, M.R. / Operation Manager
 Signed for and on behalf of
 SGS TAIWAN LTD.

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TW 0680577

Test Report

No.: GZSCR040931790/LP

Date: SEP 09, 2004

Page 1 of 1

DONGGUAN DACHEN ELECTRICAL PRODUCTS LTD.
HSIN FENG LU DON, HSIN CHENG DISTRICT,
SHEK KIT TOWN, DONG GUAN CITY, GUANG DONG

Report on the submitted sample said to be RF CABLE 镀锡编织铜丝 (镀锡铜)

SGS Ref No. : SZ040910232EC
Country of Origin : CHINA
Sample Receiving Date : SEP 03, 2004
Testing Period : SEP 03, 2004 TO SEP 08, 2004

Test Requested : As specified by client, to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : Lead content – In-house method, with reference to EPA method 3050B: 1996 .
Cadmium content – In-house method, with reference to BS EN1122: 2001 method B .
Mercury content – In-house method, with reference to EPA 3052: 1996.
Hexavalent Chromium content – with reference to EPA 3060A: 1996 & EPA 7196A: 1992 .
Analysis was performed by Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) / UV-VIS Spectrophotometer.

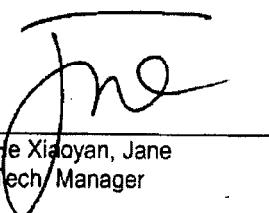
RESULTS

| | |
|--------------------------------------|------|
| Lead Content (Pb)(ppm) | 7 |
| Cadmium Content (Cd) | N.D. |
| Mercury Content (Hg) | N.D. |
| Hexavalent Chromium Content [Cr(VI)] | N.D. |

Note : - N.D. = Not Detected (< 2 ppm)
- ppm = mg/kg

*** End of Report ***

Signed for and on behalf of
SGS-CSTC Ltd.



He Xiaoyan, Jane
Tech/ Manager

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GZCM 150809



Test Report

No.: GZSCR040307948/LP

Date: MAR 15, 2004

Page 1 of 1

DONGGUAN DACHEN ELECTRICAL PRODUCTS LTD
 HSIN FENG LU DON, HSIN CHENG DISTRICT,
 SHEK KIT TOWN, DONGGUAN CITY,
 GUANGDONG, PEOPLE REPUBLIC OF CHINA

Report on the submitted sample said to be RF1.13 & 1.37 BRAID (镀银铜丝)

SGS Ref No. : SZ040302401EC-5.1
 Manufacture / Supplier : GBE
 Country of Destination : CHINA
 Sample Receiving Date : MAR 14, 2004
 Testing Period : MAR 15, 2004 TO MAR 15, 2004

Test Requested : As specified by client, to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : Lead content - In-house method .
 Cadmium content - In-house method ..
 Mercury content - In-house method ..
 Hexavalent Chromium content - with reference to EPA 3060A & EPA 7196A .
 Analysis was performed by Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) / UV-VIS Spectrophotometer.

RESULTS

| | Silvery metal wire |
|--------------------------------------|--------------------|
| Lead content (Pb) | N.D. |
| Cadmium Content (Cd) | N.D. |
| Mercury Content (Hg) | N.D. |
| Hexavalent Chromium Content [Cr(VI)] | N.D. |

Note : - N.D. = Not Detected (< 2 ppm)
 - ppm = mg/kg

*** End of Report ***

Signed for and on behalf of
 SGS-CSTC Ltd.

He Xiaoyan, Jane
 Tech. Manager

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GZCM 121235

Test Report

No.: GZSCR040307949/LP

Date: MAR 15, 2004

Page 1 of 1

DONGGUAN DACHEN ELECTRICAL PRODUCTS LTD
 HSIN FENG LU DON, HSIN CHENG DISTRICT,
 SHEK KIT TOWN, DONGGUAN CITY,
 GUANGDONG, PEOPLE REPUBLIC OF CHINA

Report on the submitted sample said to be RF1.13 CONDUCTOR (镀银铜丝)

SGS Ref No. : SZ040302401EC-5.2
 Manufacture / Supplier : GBE
 Country of Destination : CHINA
 Sample Receiving Date : MAR 14, 2004
 Testing Period : MAR 15, 2004 TO MAR 15, 2004

Test Requested : As specified by client, to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : Lead content - In-house method .
 Cadmium content - In-house method ..
 Mercury content - In-house method .
 Hexavalent Chromium content - with reference to EPA 3060A & EPA 7196A .
 Analysis was performed by Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) / UV-VIS Spectrophotometer.

RESULTS :

| | Silvery metal wire |
|--------------------------------------|--------------------|
| Lead content (Pb) | N.D. |
| Cadmium Content (Cd) | N.D. |
| Mercury Content (Hg) | N.D. |
| Hexavalent Chromium Content [Cr(VI)] | N.D. |

Note : - N.D. = Not Detected (< 2 ppm)
 - ppm = mg/kg

*** End of Report ***

Signed for and on behalf of
 SGS-CSTC Ltd.

He Xiaoyan, Jane
 Tech. Manager

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GZCM 121236

Web Ho of sheng 0769-6631919
1001

Test Report

No.: GZSCR040307950/LP

Date: MAR 15, 2004

Page 1 of 1

DONGGUAN DACHEN ELECTRICAL PRODUCTS LTD
 HSIN FENG LU DON, HSIN CHENG DISTRICT,
 SHEK KIT TOWN, DONGGUAN CITY,
 GUANGDONG, PEOPLE REPUBLIC OF CHINA

Report on the submitted sample said to be RF1.37 CONDUCTOR (镀银铜丝)

SGS Ref No. : SZ040302401EC-5.3
 Manufacture / Supplier : GBE
 Country of Destination : CHINA
 Sample Receiving Date : MAR 14, 2004
 Testing Period : MAR 15, 2004 TO MAR 15, 2004

Test Requested : As specified by client, to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.

Test Method : Lead content - In-house method .
 Cadmium content - In-house method ..
 Mercury content - In-house method .
 Hexavalent Chromium content - with reference to EPA 3060A & EPA 7196A .
 Analysis was performed by Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) / UV-VIS Spectrophotometer.

RESULTS

| | Silvery metal wire |
|--------------------------------------|--------------------|
| Lead content (Pb) | N.D. |
| Cadmium Content (Cd) | N.D. |
| Mercury Content (Hg) | N.D. |
| Hexavalent Chromium Content [Cr(VI)] | N.D. |

Note : - N.D. = Not Detected (< 2 ppm)
 - ppm = mg/kg

*** End of Report ***

Signed for and on behalf of
 SGS-CSTC Ltd.

He Xiaoyan, Jane
 Tech. Manager

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GZCM 121237



Test Report

同皇實業股份有限公司
717 台南縣 路174號

報告號碼 : CE/2005/20551A
日期 : 2005/02/15
頁數 : 1 of 2

以下測試樣品乃供應廠商所提供之確認：

樣品名稱 :
產品型號 : SMA外殼
收件日期 : 2005/02/03.
測試日期 : 2005/02/03 TO 2005/02/15

測試結果

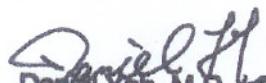
測試部位 NO.1 : 黑色金屬(請參照附件圖片)

| 測試項目: | 單位 | 測試方法 | 偵測極限值 | 結果 |
|-------|-----|---|-------|---------|
| | | | | NO.1 |
| 六價鉻 | ppm | 依照US EPA 3060A方法,用UV-VIS做分析 | 2 | N.D. |
| 鎘 | ppm | 依照 EN1122 方法B:2001或其他酸消化方法,用感應耦合電漿原子發射光譜儀(ICP-AES)做分析 | 2 | 16.3 |
| 汞 | ppm | 依照 US EPA 3052 方法或其他酸消化方法,用感應耦合電漿原子發射光譜儀(ICP-AES)做分析 | 2 | N.D. |
| 鉛 | ppm | 依照 US EPA 3050B 方法或其他酸消化方法,用感應耦合電漿原子發射光譜儀(ICP-AES)做分析 | 2 | 37136.2 |

備註：(1) N.D. = Not detected.(<MDL) / 未檢出(低於偵測極限值)

(2) ppm = mg/kg / 百萬分之一

(3) MDL= Method Detection Limit(偵測極限值)


 Daniel Yeh, M.R. Operation Manager
 Signed for and on behalf of
 SGS TAIWAN LTD.



Test Report

同皇實業股份有限公司
717 台南縣仁德鄉忠義路174號

報告號碼 : CE/2005/20551
日期 : 2005/02/15
頁數 : 2 of 2



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免責、管轄權皆明確規範之。此報告結果除非另有說明僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製。

TW 1848

Test Report

CONNEKT PRECISION ELECTRONICS CO., LTD
NO.115, HSIN TIEW RD., JENTE HSIANG, TAINAN HSIEN,
TAIWAN R.O.C.

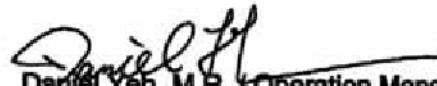
Report No. : CE/2005/51151
Date : 2005/05/16
Page : 1 of 4

The following merchandise was (were) submitted and identified by the client as :

Type of Product : TEFLON
Style/Item No : ZLA-7529RP-4
Sample Received : 2005/05/09
Testing Date : 2005/05/09 TO 2005/05/16

=====

Test Result : - Please see the next page -



Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

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Test Report

CONNEKT PRECISION ELECTRONICS CO., LTD
NO.115, HSIN TIEW RD., JENTE HSIANG, TAINAN HSIEN,
TAIWAN R.O.C.

Report No. : CE/2005/51151
Date : 2005/05/16
Page : 2 of 4

Test Result

PART NAME NO.1 : WHITE PLASTIC (PLEASE REFER TO THE PHOTO ATTACHED)

| Test Item (s): | Unit | Method | MDL | Result |
|--|------|---|--------|--------|
| | | | | No.1 |
| Monobromobiphenyl | % | With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC) | 0.0005 | N.D. |
| Dibromobiphenyl | % | | 0.0005 | N.D. |
| Tribromobiphenyl | % | | 0.0005 | N.D. |
| Tetrabromobiphenyl | % | | 0.0005 | N.D. |
| Pentabromobiphenyl | % | | 0.0005 | N.D. |
| Hexabromobiphenyl | % | | 0.0005 | N.D. |
| Heptabromobiphenyl | % | | 0.0005 | N.D. |
| Octabromobiphenyl | % | | 0.0005 | N.D. |
| Nonabromobiphenyl | % | | 0.0005 | N.D. |
| Decabromobiphenyl | % | | 0.0005 | N.D. |
| Total PBBs (Polybrominated biphenyls)/Sum of above | % | | - | N.D. |
| Monobromobiphenyl ether | % | With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC) | 0.0005 | N.D. |
| Dibromobiphenyl ether | % | | 0.0005 | N.D. |
| Tribromobiphenyl ether | % | | 0.0005 | N.D. |
| Tetrabromobiphenyl ether | % | | 0.0005 | N.D. |
| Pentabromobiphenyl ether | % | | 0.0005 | N.D. |
| Hexabromobiphenyl ether | % | | 0.0005 | N.D. |
| Heptabromobiphenyl ether | % | | 0.0005 | N.D. |
| Octabromobiphenyl ether | % | | 0.0005 | N.D. |
| Nonabromobiphenyl ether | % | | 0.0005 | N.D. |
| Decabromobiphenyl ether | % | | 0.0005 | N.D. |
| Total PBDEs(PBDEs)(Polybrominated biphenyl ethers)/Sum of above | % | | - | N.D. |

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Test Report

CONNEKT PRECISION ELECTRONICS CO., LTD
NO.115, HSIN TIEW RD., JENTE HSIANG, TAINAN HSIEN,
TAIWAN R.O.C.

Report No. : CE/2005/51151
Date : 2005/05/16
Page : 3 of 4

| Test Item (s): | Unit | Method | MDL | Result |
|--------------------|------|--|-----|--------|
| | | | | No.1 |
| Chromium VI (Cr+6) | ppm | UV-VIS after reference to US EPA 3060A. | 2 | N.D. |
| Cadmium (Cd) | ppm | ICP-AES after reference to EN 1122, method B:2001 or other acid digestion. | 2 | N.D. |
| Mercury (Hg) | ppm | ICP-AES after reference to US EPA 3052 or other acid digestion. | 2 | N.D. |
| Lead (Pb) | ppm | ICP-AES after reference to US EPA 3050B or other acid digestion. | 2 | N.D. |

NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) " - " = No Regulation
(5) " --- " = Not Applicable

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Test Report

CONNEKT PRECISION ELECTRONICS CO., LTD
NO.115, HSIN TIEW RD., JENTE HSIANG, TAINAN HSIEN,
TAIWAN R.O.C.

Report No. : CE/2005/51151
Date : 2005/05/16
Page : 4 of 4



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Test Report

LONG CHENG TECH. INT'L. CO., LTD.
3F, NO. 3, ALLEY 15, LANE 62, CHUNG HO ST., JUBEI
CITY, HSINCHU HSIEN, TAIWAN, R.O.C.

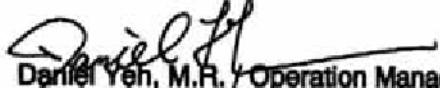
Report No. : CE/2005/52882
Date : 2005/05/23
Page : 1 of 3

The following merchandise was (were) submitted and identified by the client as :

Type of Product : PVC TUBE
Sample Received : 2005/05/16
Testing Date : 2005/05/16 TO 2005/05/23

=====

Test Result : - Please see the next page -


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

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Test Report

LONG CHENG TECH. INT'L. CO., LTD.
 3F, NO. 3, ALLEY 15, LANE 62, CHUNG HO ST., JUBEI
 CITY, HSINCHU HSIEN, TAIWAN, R.O.C.

Report No. : CE/2005/52882
 Date : 2005/05/23
 Page : 2 of 3

Test Result

PART NAME NO.1 : TRANSPARENT PVC TUBE (PLEASE REFER TO
 THE PHOTO ATTACHED)

| Test Item (s): | Unit | Method | MDL | Result | |
|---|-------------|--|------------|---------------|--|
| | | | | No.1 | |
| Monobromobiphenyl | % | With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC) | 0.0005 | N.D. | |
| Dibromobiphenyl | % | | 0.0005 | N.D. | |
| Tribromobiphenyl | % | | 0.0005 | N.D. | |
| Tetrabromobiphenyl | % | | 0.0005 | N.D. | |
| Pentabromobiphenyl | % | | 0.0005 | N.D. | |
| Hexabromobiphenyl | % | | 0.0005 | N.D. | |
| Heptabromobiphenyl | % | | 0.0005 | N.D. | |
| Octabromobiphenyl | % | | 0.0005 | N.D. | |
| Nonabromobiphenyl | % | | 0.0005 | N.D. | |
| Decabromobiphenyl | % | | 0.0005 | N.D. | |
| Total | % | | - | N.D. | |
| PBBs(Polybrominated biphenyls)/ Sum of above | | | | | |
| Monobromobiphenyl ether | % | With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC) | 0.0005 | N.D. | |
| Dibromobiphenyl ether | % | | 0.0005 | N.D. | |
| Tribromobiphenyl ether | % | | 0.0005 | N.D. | |
| Tetrabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Pentabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Hexabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Heptabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Octabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Nonabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Decabromobiphenyl ether | % | | 0.0005 | N.D. | |
| Total | % | | - | N.D. | |
| PBBEs(PBDEs)(Polybrominated biphenyl ethers)/ Sum of above | | | | | |

NOTE: (1) N.D. = Not detected (<MDL)

(2) ppm = mg/kg

(3) MDL = Method Detection Limit

(4) " - " = No Regulation

Test Report

LONG CHENG TECH. INT'L. CO., LTD.
3F, NO. 3, ALLEY 15, LANE 62, CHUNG HO ST., JUBEI
CITY, HSINCHU HSIEN, TAIWAN, R.O.C.

Report No. : CE/2005/52882
Date : 2005/05/23
Page : 3 of 3



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测试报告

编号: GZSCR050312622/LP

日期: 2005年3月18日 页码 1 of 1

千岛金属制品有限公司
东莞市塘厦镇新太阳工业城第二座

本报告是基于所提供的名称为“Sn96.5/Ag3/Cu0.5 无铅锡条”的样品所做的测试。

SGS 参考编号 : GZ050302410EC-5.1

收样日期 : 2005年3月14日

测试日期 : 2005年3月14日至 2005年3月18日

测试要求 : 分析委托样品中的铅、镉、汞和六价铬含量。

测试方法 : 铅含量 - SGS 内部方法, 参照 EPA 方法 3050B:1996
镉含量 - SGS 内部方法, 参照 BS EN1122:2001 方法 B
汞含量 - SGS 内部方法, 参照 EPA 方法 3052:1996
六价铬含量 - 参照 EPA 方法 3060A:1996 和 7196A:1992
分析仪器为电感耦合等离子体发射光谱仪/紫外分光光度计。

测试结果:

银色金属条

| | |
|----------------|------|
| 铅含量 (Pb)(ppm) | 190 |
| 镉含量 (Cd) | N.D. |
| 汞含量 (Hg) | N.D. |
| 六价铬含量 [Cr(VI)] | N.D. |

说明: - N.D. = 没有检测到 (< 2 ppm)
- ppm = 10克/千克

*** 报告完 ***

Signed for and on behalf of
SGS-CSTC Ltd.

Zhang Li, Amy
Sr. Engineer



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GZCM 224593



Test Report

No. 2091267/LD

Date : Jul 27 2004

Page 1 of 2

THOUSAND ISLAND METAL FOIL MANUFACTURING COMPANY
 NEW SUN IND., LINCUN,
 TANGXIA TOWN,
 DONGGUAN CITY,
 CHINA

Report on the submitted samples said to be QIAN DAO LEAD FREE FLUX.

SGS Job No. : 1576288
 SGS Ref. No. : SZEC0040707806EC
 Buyer : AOC ELECTRONIC CO.
 Sample Receiving Date : JUL 13 2004
 Testing Period : JUL 14-23 2004

Test Requested : 1) To determine the Cadmium Content in the submitted sample.
 2) To determine the Lead Content on the submitted sample.
 3) To determine the Mercury Content on the submitted sample.
 4) To determine the Hexavalent Chromium Content on the submitted sample.
 5) Determination of PBBs (polybrominated biphenyls), PBDEs (Polybrominated diphenylethers) of the submitted sample.

Test Method : 1) With reference to BS EN 1122:2001, Method B, analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES).
 2) As specified in EPA Method 3050B.
 Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES).
 3) As specified in EPA Method 3052.
 Analysis was performed by Inductively Coupled Argon Plasma-Atomic Emission Spectrometry (ICP-AES).
 4) As specified in EPA Method 3060A & 7196A.
 The samples were alkaline digested by using EPA Method 3060A, and then analyzed by using Colorimetric method 7196A.
 5) With reference to SGS in-house method. Analysis was performed by GC/MS.

Test Results : 1-5) Please refer to next page.

Signed for and on behalf of
 SGS Hong Kong Ltd

Lee Fung Mai, Miranda
 Senior Manager

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H10863526

Test Report

No. 2091267/LD

Date : Jul 27 2004

Page 2 of 2

Test Results

| Element | ppm | 1 |
|--|---------|---|
| 1) Cadmium (Cd) | < 2 ppm | |
| 2) Lead (Pb) | < 2 ppm | |
| 3) Mercury (Hg) | < 2 ppm | |
| 4) Hexavalent Chromium (Cr ⁶⁺) | < 2 ppm | |

(Results shown are of the total weight of samples)

Note : < = Less than
ppm = mg/kg

5)

| Flame Retardants | 1 | Detection Limit |
|---------------------------------------|----|-----------------|
| Polybrominated Biphenyls (PBBs) | — | — |
| Monobromobiphenyl | ND | 5 ppm |
| Dibromobiphenyl | ND | 5 ppm |
| Tri bromobiphenyl | ND | 5 ppm |
| Tetrabromobiphenyl | ND | 5 ppm |
| Pentabromobiphenyl | ND | 5 ppm |
| Hexabromobiphenyl | ND | 5 ppm |
| Heptabromobiphenyl | ND | 5 ppm |
| Octabromobiphenyl | ND | 5 ppm |
| Nonabromobiphenyl | ND | 5 ppm |
| Decabromobiphenyl | ND | 5 ppm |
| Polybrominated Diphenylethers (PBDEs) | — | — |
| Monobromodiphenyl ether | ND | 5 ppm |
| Dibromodiphenyl ether | ND | 5 ppm |
| Tri bromodiphenyl ether | ND | 5 ppm |
| Tetrabromodiphenyl ether | ND | 5 ppm |
| Pentabromodiphenyl ether | ND | 5 ppm |
| Hexabromodiphenyl ether | ND | 5 ppm |
| Heptabromodiphenyl ether | ND | 5 ppm |
| Octabromodiphenyl ether | ND | 5 ppm |

Note: ND = Not Detected

Non-detected is lower than detection limit value.

Sample Description:

1. Transparent Lt. Yellow Liquid

Remark : This report is to supersede test report number 2090099/LD.

*** End of Report ***

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H10883525

SGS - 8/F, Metropolis Square, 23 On Yiu Street, Shu Lek Yuen, Chai Wan, N.T., Hong Kong. t (852) 2394401-9 f (852) 27513125 www.sgs.hk.com

测试报告

编号: GZSCR050312626/LP

日期: 2005年3月18日 页码 1 of 1

千岛金属锡品有限公司
东莞市塘厦镇新太阳工业城第三座

本报告是基于所提供的名称为“Sn96.5/Ag3/Cu0.5 无铅锡线”的样品所做的测试

SGS 参考编号 : GZ050302410EC-5.5

收板日期 : 2005年3月14日

测试日期 : 2005年3月14日至2005年3月18日

测试要求 : 分析委托样品中的铅、镉、汞和六价铬含量。

测试方法 : 铅含量 - SGS 内部方法, 参照 EPA 方法 3050B:1996。

镉含量 - SGS 内部方法, 参照 BS EN1122:2001 方法 B,

汞含量 - SGS 内部方法, 参照 EPA 方法 3052:1996。

六价铬含量 - 参照 EPA 方法 3060A:1996 和 7196A:1992。

分析仪器为电感耦合等离子体发射光谱仪/紫外分光光度计。

测试结果:

| 银色金属线 | |
|----------------|------|
| 铅含量 (Pb)(ppm) | 188 |
| 镉含量 (Cd) | N.D. |
| 汞含量 (Hg) | N.D. |
| 六价铬含量 [Cr(VI)] | N.D. |

说明: - N.D. = 没有检测到 (< 2 ppm)

- ppm = 毫克/千克

*** 报告完 ***

Signed for and on behalf of
SGS-CSTC Ltd.

Zhang Li, Amy
Sr. Engineer



**GE Plastics**

GE Plastics
One Plastics Avenue
Pittsfield, MA 01201
(413) 448-5800

CYCOLOY® C6200

North America: Commercial

[Design Solution Center](#) >> [Design Tools](#) >> [Datasheets](#)

ABS+PC, nonchlorinated, nombrominated flame retardant. Recommended for thin-wall applications

Processing

INJECTION MOULDING-USA

CLY- IM-03

| | | |
|--------------------------|------------|----------|
| Drying Temperature | 180-190 | deg F |
| Drying Time (basic) | 3-4 | h |
| Drying Time (cumulative) | 8 | h |
| Moisture Content, Max | 0.04 | % |
| Moisture Content, Min | - | % |
| Melt Temperature | 470-530 | deg F |
| Nozzle Temperature | 470-530 | deg F |
| Front Temperature | 470-530 | deg F |
| Middle Temperature | 430-510 | deg F |
| Rear Temperature | 430-490 | deg F |
| Mold Temperature | 140-180 | deg F |
| Back Pressure | 50-100 | psi |
| Screw Speed | 40-70 | rpm |
| Suggested shot size | 30-80 | % |
| Clamp Tonnage | 3-5 | tons/psi |
| Vent Depth | .0015-.003 | inch |

Source Eris, last updated: 2001/11/06

CYCOLOY® C6200

North America: Commercial

ABS+PC, nonchlorinated, nombrominated flame retardant. Recommended for thin-wall applications

Properties

MECHANICAL

| Property | Typical Data | Unit | Method |
|--|--------------|------|------------|
| Tensile Str, yld, Type I, 2.0 in/min | 9700 | psi | ASTM D 638 |
| Tensile Elong, brk, Type I, 2.0 in/min | 50.0 | % | ASTM D 638 |
| Flex Stress, yld, 0.10 in/min, 4" span | 15000 | psi | ASTM D 790 |
| Flex Mod, 0.10 in/min, 4" span | 390000 | psi | ASTM D 790 |

IMPACT

| Property | Typical Data | Unit | Method |
|---|--------------|----------|-------------|
| Izod Impact, notched, 73F | 10.0 | ft-lb/in | ASTM D 256 |
| Instrumented Impact Energy @ peak, 73F | 540 | in-lbs | ASTM D 3763 |
| Instrumented Impact Energy @ peak, -22F | 480 | in-lbs | ASTM D 3763 |

THERMAL

| Property | Typical Data | Unit | Method |
|----------|--------------|------|--------|
| | | | |

| | | |
|---|-----------|------------|
| HDT, 264 psi, 0.125", unannealed | 190 deg F | ASTM D 648 |
| HDT, 264 psi, 0.250", unannealed | 195 deg F | ASTM D 648 |
| Thermal Index, Elec Prop | 85 deg C | UL 746B |
| Thermal Index, Mech Prop with impact | 85 deg C | UL 746B |
| Thermal Index, Mech prop without impact | 85 deg C | UL 746B |

PHYSICAL

| Property | Typical Data | Unit | Method |
|---|--------------|-----------|-------------|
| Specific Gravity, solid | 1.18 | - | ASTM D 792 |
| Mold Shrinkage, flow, 0.125" | 4-6 | in/in E-3 | ASTM D 955 |
| Mold Shrinkage, xflow, 0.125" | 4-6 | in/in E-3 | ASTM D 955 |
| Melt Flow Rate, 260C/2.16 kgf | 14.5 | g/10 min | ASTM D 1238 |
| □ Spiral Flow, 500F, 10 ips, .125 X 60 in | 27.0 | in | □ |

ELECTRICAL

| Property | Typical Data | Unit | Method |
|--|--------------|----------|-------------|
| Arc Resistance, Tungsten (+/- 0.125") | 6 | PLC Code | ASTM D 495 |
| Hot Wire Ignition (+/- 0.125") | 2 | PLC Code | UL 746A |
| High Voltage Arc Track Rate (+/- 0.125") | 3 | PLC Code | UL 746A |
| High Amp Arc Ign, surface (+/- 0.125") | 0 | PLC Code | UL 746A |
| Comparative Track Index (+/- 0.125") | 2 | PLC Code | UL 746A |
| Volume Resistivity | >1E15 | Ohm-cm | IEC 60093 |
| Surface Resistivity, ROA | >1E15 | Ohm/Sq | IEC 60093 |
| Dielectric Strength, in oil, 0.8 mm | 35 | kV/mm | IEC 60243-1 |
| Dielectric Strength, in oil, 1.6 mm | 25.0 | kV/mm | IEC 60243-1 |
| Dielectric Strength, in oil, 3.2 mm | 17.0 | KV/mm | IEC 60243-1 |
| Relative Permittivity, 50 Hz | 2.8 | - | IEC 60250 |
| Relative Permittivity, 1 MHz | 2.7 | - | IEC 60250 |
| Dissipation Factor, 50 Hz | 0.0040 | - | IEC 60250 |
| Dissipation Factor, 1 MHz | 0.0080 | - | IEC 60250 |

FLAME CHARACTERISTICS

| Property | Typical Data | Unit | Method |
|-------------------------------------|--------------|----------|------------|
| UL File Number, GLOBAL | E161759 | - | - |
| UL File Number, USA | E121562 | - | - |
| HB Rated (tested thickness) | 0.028 | inch | UL 94 |
| V-1 Rated (tested thickness) | 0.048 | inch | UL 94 |
| V-0 Rated (tested thickness) | 0.058 | inch | UL 94 |
| 5VA Rating (tested thickness) | 0.134 | inch | UL 94 |
| 5VB Rating (tested thickness) | 0.079 | inch | UL 94 |
| CSA (See File for complete listing) | LS88480 | File No. | CSA LISTED |

Source Eris, last updated: 2001/11/06

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

Disclaimer: THE MATERIALS AND PRODUCTS OF THE BUSINESSES MAKING UP THE GE PLASTICS UNIT OF GENERAL ELECTRIC COMPANY, ITS SUBSIDIARIES AND AFFILIATES ("GEP"), ARE SOLD SUBJECT TO GEP'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES

Wenbin Ouyang
Product Stewardship & Compliance
Greater China

February 9th, 2004

GE Plastics, Greater China
No. 58 Aidiu Rd, Waigaoqiao Free Trade Zone
Shanghai 200131
The People's Republic of China
Tel: +86-(21)-30460000 ext 3906
Fax: +86-(21)-30450100
Internet: Arnold.Ouyang@geplex.ge.com.

Declaration on GE Plastics

Dear Most Valued Customer:

Thank you for using GE Plastics. It is herewith declared that GE Plastics, Greater China does not use any of the following constituents in the confidential and proprietary production of its resin products of LEXAN[®], NORYL[®], CYCOLOY[®], CYCOLAC[®], ULTEM[®], VALOX[®], and XENOY[®].

| | | |
|--|--|--|
| 1. Cadmium and its compounds | 24. Benzene | 45. Perchloroethylene (Per) |
| 2. Lead and its compounds | 25. Beryllium compounds | 46. Pesticides |
| 3. Mercury and its compounds | 26. Chlorinated fluorocarbons (CFCs/FCKW) | 47. Picric acid |
| 4. Hexavalent chromium compounds | 27. Chlorinated paraffins | 48. Polybrominated biphenyls (PBBs) |
| 5. 1,1,1,2-Tetrachloroethane | 28. Diarylide pigments | 49. Polybrominated diphenyl ethers (PBDEs) |
| 6. 1,1,1-Trichloroethane | 29. N,N-dimethylacetamide (DMA) | 50. Polychlorinated biphenyls (PCBs) |
| 7. 1,1,2,2-Tetrachloroethane | 30. N,N-dimethylformamide (DMF) | 51. Polychlorinated naphthalenes (PCNs) |
| 8. 1,1,2-Trichloroethane | 31. Formaldehyde | 52. Polychlorinated terphenyls (PCTs) |
| 9. 1,2,3-Trichloropropane | 32. Fungicides | 53. Polycyclic aromatic hydrocarbons |
| 10. 1,2,5,6,9,10-Hexahydronocyclododecane | 33. Glycol ethers and glycol ether acetates | 54. Polyvinyl chloride |
| 11. 1,2-Dibromoethane | 34. Halogenated dioxins and furans | 55. Selenium compounds |
| 12. 1,1-Dichloroethylene | 35. Halogenated dibenzodioxins and dibenzofurans | 56. Tar oils |
| 13. 1,2-Dichloroethane | 36. Halon | 57. Tellurium compounds |
| 14. 2,4,6-Tri-tert-butylphenol | 37. Hydrazines | 58. Tetrabromobisphenol-A, bis(2,3-dibromopropyl ether) (e.g. FR-720, PE-68) |
| 15. 2-Naphthylamine or its salts | 38. Hydrochlorofluorocarbons (HCFCs/HFCKW) | 59. Thallium compounds |
| 16. 3,3'-Dichloro-4,4'-diaminodiphenylethane | 39. Metal carbonyls | 60. Trichloroethylene (Tri) |
| 17. 4,4-Methylenebis(2-chloroaniline) | 40. N-methylacetamide (NME) | 61. Vinyl chloride |
| 18. 4-Aminobiphenyl and its chlorides | 41. N-methylformamide (NMF) | 62. Xylenes |
| 19. 4-Aminodiphenol | 42. Nitrosamine | |
| 20. 4-chloro-2-methylaniline and its salt | 43. Organic Tin Compounds (Tributyl tin and Triphenyl tin) | |
| 21. 4-Nitrodiphenyl and the salts | 44. Pentachlorophenols or its salts | |
| 22. Arsenic compounds | | |
| 23. Asbestos | | |

Please be noted that any incidental presence of the above substances would have to be described as an uncontrollable impurity and would only be present at trace level.

I trust the above information will be of use to you. Should you need further information, you may contact me at the address shown above. Thank you.

Yours faithfully,

Wenbin Ouyang

Wenbin Ouyang, Ph.D. for GE Plastics

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Chemical Laboratory - KAO., SGS Taiwan Ltd.

TEST REPORT

REPORT NO. KA/2004/C1138

DATE: 2005/1/4

PAGE: 1 OF 1

THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED AND IDENTIFIED BY THE CLIENT AS :

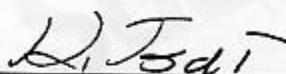
CLIENT : GRAND PACIFIC PETROCHEMICAL CORPORATION.
PRODUCT DESCRIPTION : ABS.
STYLE/ITEM NO. : D-1000S.
TESTING DATE : 2004/12/28 TO 2005/1/4 .
SAMPLE RECEIVED : 2004/12/28.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

| TEST ITEM(S) | UNIT | METHOD | DET. LMT | RESULT |
|--------------|------|---|----------|--------|
| CADMIUM | ppm | ANALYSIS BY ICP-AES WITH ADVANCE TREATMENT EN1122, METHOD B:2001. | 2 | n.d. |
| CHROMIUM VI | ppm | ANALYSIS BY US EPA 7196A WITH ADVANCE TREATMENT US EPA 3060A. | 2 | n.d. |
| MERCURY | ppm | ANALYSIS BY ICP-AES WITH ADVANCE TREATMENT US EPA 3052 | 2 | n.d. |
| LEAD | ppm | ANALYSIS BY ICP-AES WITH ADVANCE TREATMENT US EPA 3050B | 2 | n.d. |
| PBBs | % | WITH REFERENCE TO 83/264/EEC. ANALYSIS WAS PERFORMED BY GC/ECDMS OR HPLC/DAD/MS. | 0.0005 | n.d. |
| PBDEs | % | WITH REFERENCE TO 83/264/EEC. ANALYSIS WAS PERFORMED BY GC/ECDMS OR HPLC/DAD/MS. | 0.0005 | n.d. |

NOTE : n.d. = not detected.

<END>



George Huang / Supervisor
Sign for and on behalf of
SGS Taiwan Limited



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TW 1254579



Test Report

映森企業股份有限公司
*241台北縣三重市中正北路540巷13號2樓

報告號碼 : CB/2005/54422
日期 : 2005/05/27
頁數 : 1 of 2

以下測試樣品乃供應商所提供的及確認：

樣品名稱 : 鐵鉚釘
買主 / 訂單號碼 : 映森企業股份有限公司
收件日期 : 2005/05/29.
測試日期 : 2005/05/29 TO 2005/05/27

測試結果

測試部位 NO.1 : 黑色金屬(請參照附圖片)

| 測試項目 | 單位 | 測試方法 | 檢測極限值 | 結果 |
|------|-----|---|-------|------|
| 六價鉻 | ppm | 依照 US EPA 3080A 方法, 用 UV-VIS 虹吸分析 | 2 | 5.62 |
| 鎘 | ppm | 依照 EN1122 方法 B:2001 或其他酸消化方法, 用感應耦合電漿原子發射光譜儀 (ICP-AES) 進行分析 | 2 | N.D. |
| 汞 | ppm | 依照 US EPA 3052 方法或其他酸消化方法, 用感應耦合電漿原子發射光譜儀 (ICP-AES) 進行分析 | 2 | N.D. |
| 鉻 | ppm | 依照 US EPA 3050B 方法或其他酸消化方法, 用感應耦合電漿原子發射光譜儀 (ICP-AES) 進行分析 | 2 | 19.0 |

備註: (1) N.D. = Not detected, (MDL) / 未檢出(低於檢測極限值)

(2) ppm = mg/kg / 百萬分之一

(3) MDL= Method Detection Limit(檢測極限值)

Daniel Yen, M.P. Operation Manager
 Signed for and on behalf of
 SGS TAIWAN LTD.

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1911764

No. 23 Wu-Dhuan Road, West District, Zone, Taoyuan County, Taiwan. / 台北縣五股工業五路33號
 +886-2-2290-2222 / +886-2-2290-3222 / www.tw.sgs.com

6

5

4

3

2

1

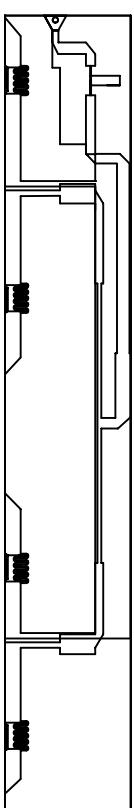
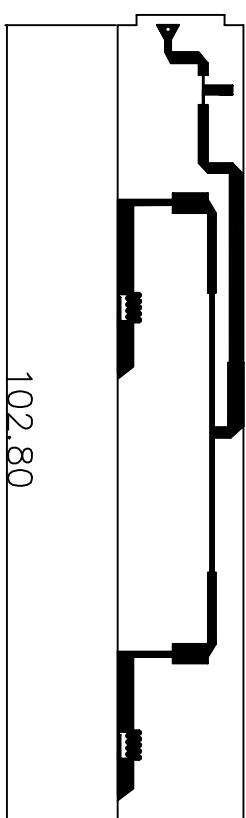
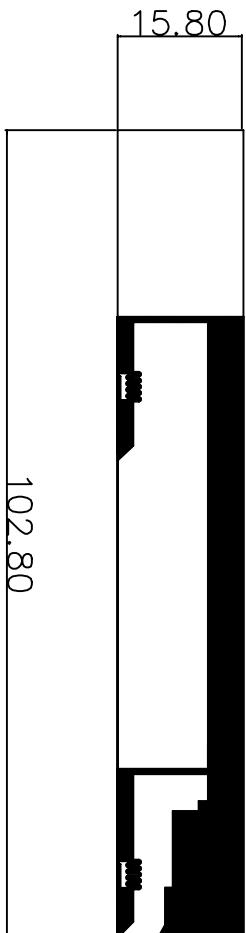
D

D

DRAWING
NUMBER

side B

side A



B

C

D

Lct LONG CHENG ELECTRONICS CO. LTD
龍呈國際科技有限公司

DESCRIPTION:

Dual Band PCB Roger RO4003

A

6

5

4

3

2

1

B

C

A

| UNIT <i>mm</i> | APVD | CHK |
|----------------------|----------------|------|
| MATERIAL SEE NOTE | | |
| FINISH | 6/21/04" | |
| DWN | 21-06-2004 | |
| 3 LTR | DANIEL YANG | |
| REVISION RECORD | DWN CHK | DATE |
| 4 | 3 | |
| 5 | 2 | |
| 6 | 1 | |

A

B

C

D

Position Statement on Lead-Free Products and WEEE and RoHS Compliance**November 5, 2004**

The European Union has adapted the “Restriction on Use of Hazardous Substances in Electrical and Electronic Equipment” (RoHS) and the “Waste Electrical and Electronic Equipment” (WEEE) Directives. Arlon, Materials for Electronics Division, a leading company in Electronic Substrates and High Performance Laminates market, is committed to meet the RoHS and WEEE directives. Arlon’s product portfolio is compliant to RoHS and WEEE directives and has historically not contained the restricted substances.

These restricted substances include: Lead(Pb), Mercury(Hg), Cadmium(Cd), Hexavalent Chromium(Cr⁶⁺), Polybrominated biphenyls (PBB), and Polybrominated diphenyl Ethers (PBDE). Arlon’s product portfolio also does not utilize another brominated flame retardant —tetrabromobisphenol (TBBP-A), which is currently not on the list, but, may be added in the future. Arlon has also restricted these substances in all future products.

The European Union has also announced a warning concerning a proposed ban on the introduction of materials containing Pentabromodiphenyl Ether, Octabromodiphenyl Ether and Decabromodiphenylethers. Arlon has performed a review and found none of these referenced materials are utilized in any of our products.

Commitment to Compliance:

Arlon is able to advise that all Microwave Materials and Electronic Substrates are compliant with RoHS and WEEE Directives. Arlon will continue to work very closely with suppliers to insure all suppliers maintain their compliance with the RoHS and WEEE Directives. It is essential for Arlon’s suppliers/partners to understand and comply to the RoHS and WEEE directives.

ARLON
MATERIALS FOR ELECTRONIC

9433 Hyssop Drive, Rancho Cucamonga, California 91730 • Telephone: (909) 987-9533 • Fax: (909) 987-8541

1100 Governor Lea Road, Bear, Delaware, 19701 • Telephone: (302) 834-2100, (800) 635-9333 • Fax: (302) 834-2574

44 Wilby Avenue, Little Lever, Bolton, Lancashire, BL31QE, UK • Telephone: (44) 120-457-6068 • Fax: (44) 120-479-6463

Website: www.arlon-med.com





Advanced Circuit Materials

100 South Roosevelt Avenue / Chandler, AZ 85226-3415 / 480.961.1382 / Fax: 480.961.4533

Statement on WEEE and RoHS Directives

Rogers Corporation, as a supplier of High Frequency Circuit Materials, through its Advanced Circuit Materials Division, is committed to providing materials which are safe with respect to the environment and human health. In that regard, Rogers takes note of the European Union WEEE and ROHS directives, which prohibit the following substances in electrical and electronic equipment by 1 July 2006:

Lead
Mercury
Cadmium
Hexavalent chromium,
polybrominated biphenyls (PBBs)
polybrominated diphenyl ethers (PBDEs)

Rogers is able to advise that all our High Frequency Circuit Materials* are in compliance with WEEE and RoHS directives on these substances.

A brominated flame retardant: brominated aromatic imide is used in RO4350B, RO4350ENZ, RO4450B, RO4403. This flame retardant has not been implicated in the possible production of dioxins, as have some other brominated flame retardants; and there are no restrictions on its use.

*(RO2800, RO3003, RO3003M, RO3003Q, RO3003 60Q, RO3006, RO3010, RO3203, RO3206, RO3035 M, RO3210, RO3263, RO4003B, RO4003C, RO4232, RO4233, RO4350B, RO4350BIA, RO4403, RO4450, RT5870, RT5880, RT6002, RT6006, RT6010.2, RT6010.2LM, RT6010.5, RT6010.5LM, RT6010.8, RT6010.8LM, RT6202, TMM3, TMM4, TMM5, TMM6, TMM10I, TMM13I, TMM4I, UL DK2.40, UL DK2.43, UL DK2.45, UL DK2.48, UL DK2.50, UL DK2.55, UL DK2.60, UL22, Rflex 36BP, Rflex 3850, Rflex 38BP)

A handwritten signature in black ink.

Frank Gillern
Division Vice President

A handwritten signature in blue ink.

Vince Landi
Development Manager

A handwritten signature in blue ink.

Kelly O'Brien
EHS Specialist

The world runs better with Rogers.

www.rogerscorporation.com

Test Report

駱泰企業有限公司
*330桃園縣桃園市龍鳳一街2號

報告號碼 : CE/2004/63057
日期 : 2004/07/02
頁數 : 1 of 1

以下測試樣品乃供應廠商所提供之確認：

樣品名稱 : 瞬間膠
產品型號 : HOLDTITE CA304
生產或供應廠商 : 駱泰企業有限公司 LOCTAI ENTERPRISE CO., LTD.
收件日期 : 2004/06/25.
測試日期 : 2004/06/25 TO 2004/07/02

測試結果

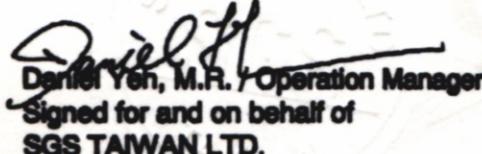
測試部位 NO.1 : 透明膠

| 測試項目: | 單位 | 測試方法 | 偵測極限值 | 結果 | | | | |
|-------|-----|--|-------|------|--|--|--|--|
| | | | | NO.1 | | | | |
| 六價鉻 | ppm | 依照US EPA 7196A及3060A方法 | 2 | N.D. | | | | |
| 鎘 | ppm | 依照 EN1122 方法B:2001或其他酸消化方法,用感應耦合電漿原子發射光譜儀 (ICP-AES)做分析 | 2 | N.D. | | | | |
| 汞 | ppm | 依照 US EPA 3052 方法或其他酸消化方法,用感應耦合電漿原子發射光譜儀 (ICP-AES)做分析 | 2 | N.D. | | | | |
| 鉛 | ppm | 依照 US EPA 3050B 方法或其他酸消化方法,用感應耦合電漿原子發射光譜儀 (ICP-AES)做分析 | 2 | N.D. | | | | |

備註：(1) N.D. = Not detected.(<MDL) / 未檢出(低於偵測極限值)

(2) ppm = mg/kg / 百萬分之一

(3) MDL= Method Detection Limit(偵測極限值)


 Daniel Yen, M.R. / Operation Manager
 Signed for and on behalf of
 SGS TAIWAN LTD.

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TW 0892519