

亞 驪 企 業 股 份 有 限 公 司
ARISTOTLE ENTERPRISES

承 認 申 請 書

客戶名稱: 捷超通訊科技股份有限公司
Customer
廠商料號: RFA-02-C2H1-06-50-白
Part No.
品名: 2.4GHz, 無鉛製程, 1.13,L=50mm
Description
圖號: RFA-02-C2H1-06-50-白.DWG
Drawing No.
客戶料號:
Drawing No.

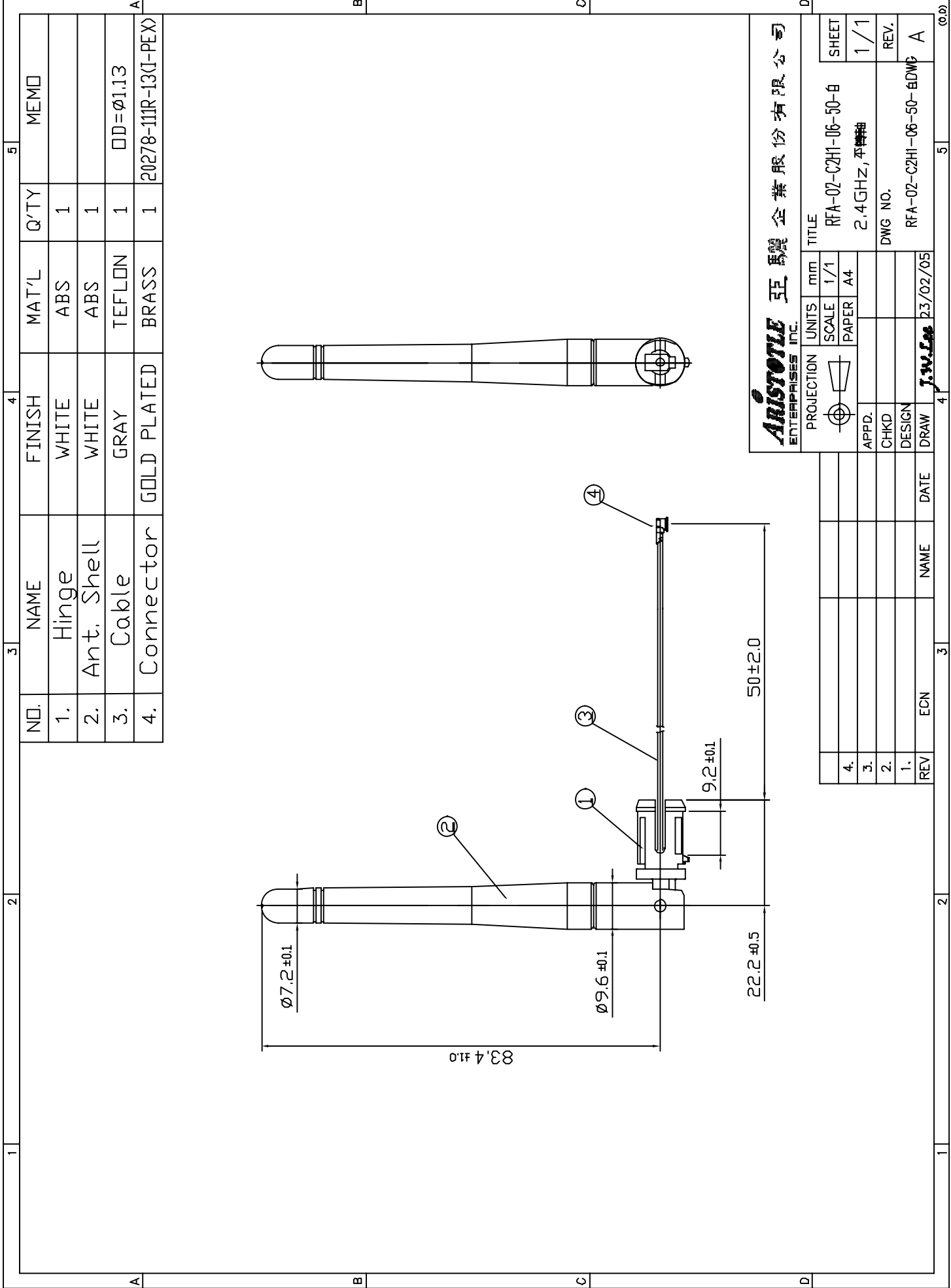
出廠簽章:

| 檢 查 TEST BY | 核 對 CHECK BY | 承 認 APPROVE BY |
|----------------|-----------------|-------------------|
| 周沂珮 | 黃秋芳 | 廖煥文 |

承認簽章:

| 檢 查 TEST BY | 核 對 CHECK BY | 承 認 APPROVE BY |
|----------------|-----------------|-------------------|
| | | |

地址:台北縣中和市莒光路 63 號 8 樓
電話:02-2225-8209
傳真:02-2225-7523



| NO. | NAME | FINISH | MAT'L | Q'TY | MEMO |
|-----|------------|-------------|--------|------|----------------------|
| 1. | Hinge | WHITE | ABS | 1 | |
| 2. | Ant. Shell | WHITE | ABS | 1 | |
| 3. | Cable | GRAY | TEFLON | 1 | OD=Ø1.13 |
| 4. | Connector | GOLD PLATED | BRASS | 1 | 20278-111R-13(I-PEX) |

ARISTOLE
ENTERPRISES INC.

PROJECTION

| | |
|-------|-----|
| UNITS | mm |
| SCALE | 1/1 |
| PAPER | A4 |

TITLE
RFA-02-C2H1-06-50-B
2.4GHZ, 平#轴

APPD. _____
CHKD _____
DESIGN _____
DRAW **J.W.Lee** 23/02/05

DWG NO. _____
REV. _____
RFA-02-C2H1-06-50-BDWB A

| REV | ECN | NAME | DATE |
|-----|-----|------|------|
| 4. | | | |
| 3. | | | |
| 2. | | | |
| 1. | | | |



CHI MEI CORPORATION

59-1 SAN CHIA, JEN TE, TAINAN COUNTY, TAIWAN R.O.C. TEL: 886-6-266-5000, FAX: 886-6-266-5555~7

泛用級 ABS, POLYLAC[®] PA-757

VIW

材料特性

| 特性(Properties) | 測試方法(Test Method) | 測試條件(Test Condition) | 單位(Unit) | PA-757 |
|------------------------------------|--------------------|--------------------------|--|--------------------|
| 引張強度 Tensile Strength | ASTM D638 | 1/8", 6 mm/min | Kg/cm ² (lb/in ²) | 480(6800) |
| 延伸率 Tensile Elongation | ASTM D638 | 1/8", 6 mm/min | % | 20 |
| 彎曲強度 Flexural Strength | ASTM D790 | 1/4", 2.8 mm/min | Kg/cm ² (lb/in ²) | 820(11660) |
| 彎曲彈性率 Flexural Modulus | ASTM D790 | 1/4", 2.8 mm/min | Kg/cm ² (lb/in ²) | 27000(380000) |
| IZOD 衝擊強度 Izod Impact Strength | ASTM D256(Notched) | 1/4", 23°C 1/8", 23°C | Kg-cm/cm(ft-lb/in) Kg-cm/cm(ft-lb/in) | 18(3.3) 20(3.7) |
| 流動係數 Melt Flow Index | ASTM D1238 | 200°C, 5Kg | g/10min | 1.8 |
| 硬度 Hardness | ASTM D785 | 1/2" | R Scale | 116 |
| 比重 Specific Gravity | ASTM D792 | 23°C | - | 1.05 |
| 軟化點 Vicat Softening Temp | ASTM D1525 | 1/8", 50°C/hr | °C (°F) | 105(221) |
| 熱變形溫度 H.D.T Annealed(85°C, 8hr) | ASTM D648 | 1/4", 120°C/hr | °C (°F) | 99(210) |
| Unannealed | | | | 88(190) |
| 燃燒率 Flammability | UL 94 | - | - | 1/16"HB |

以上數據僅代表一般通用數據，不代表每一產品的規格值

若有任何疑問請洽產品推廣課 06-2665000, 06-2663000



奇美實業股份有限公司

台灣省台南縣仁德鄉三甲村59-1號 電話：886-6-266-3000, 傳真：886-6-266-5555~7

1/2(A-GHE)

物質安全資料表

V1W

1. 物品及廠商資料

| | | | | | | | | |
|------|--------------------------------|--------|--------|---------|---------|--------|--------|--------|
| 產品名稱 | Polylac [®] | PA-707 | PA-757 | PA-757N | PA-717C | PA-727 | PA-747 | PA-709 |
| 製造商 | 奇美實業股份有限公司 | | | | | | | |
| 地址 | 台灣省台南縣仁德鄉三甲村59-1號 | | | | | | | |
| 電話 | 886 6-2663000 Ext.1361 (產品推廣課) | | | | | | | |
| 緊急電話 | 886-6-2663000 Ext.1361 (產品推廣課) | | | | | | | |
| 傳真電話 | 886-6-2667981 | | | | | | | |

2. 成品辨識資料

| | |
|----------|--|
| 單一產品或混合物 | 單一產品 |
| 化學名稱 | Acrylonitrile Butadiene Styrene Copolymer |
| 含量 | >98% (添加劑≤2%) |
| 化學式 | (C ₃ H _{3.7} N, C ₄ H ₆ , C ₈ H ₈) _x |
| CAS No. | 9003-56-9 |
| 危害性不純物 | 無 |

3. 危害性分類

| | |
|-----------|---|
| 健康危害效應 | 無 |
| 環境影響 | 無 |
| 物理性及化學性危害 | 無 |
| 特殊危害 | 無 |

4. 急救措施

| | |
|------|---|
| 吸入 | 若吸入熔融樹脂逸出之氣體，將患者移至通風處，立即送醫。 |
| 皮膚接觸 | 若接觸到塑膠粒或塑膠粉末，以清水沖洗。 若接觸到熔膠，以大量(肥皂)水沖洗患部及衣物，立即送醫。 |
| 眼睛接觸 | 若接觸到塑膠粒或塑膠粉末，以大量清水至少沖洗15分鐘。 若有不適，立即送醫。 若接觸到高溫熔融樹脂逸出之氣體，以大量清水至少沖洗15分鐘。 若有不適，立即送醫。 |
| 吞食 | 催吐，以清水漱口，若有不適，立即送醫。 |

5. 消防措施

| | |
|--------------|------------|
| 適用滅火劑 | 水、泡沫、乾粉 |
| 滅火時可能遭遇之特殊危害 | 無 |
| 特殊滅火程序 | 移除可燃物 |
| 消防人員之特殊防護設備 | 使用供氧式呼吸防護具 |

6. 洩漏處理方法

| | |
|---------|----------------------------|
| 個人應注意事項 | 若塑膠粒或塑膠粉末殘留於地面上，可能會導致人員滑倒。 |
| 環境注意事項 | 為防止鳥類或魚類由排水系統中攝食，須徹底回收。 |
| 清理方法 | 回收或廢棄 |

7. 安全處置與儲存方法

| | |
|----|--|
| 處置 | 操作處所須嚴禁煙火，做好整理整頓以避免粉塵累積。為防止塵爆，空氣輸送管路、袋濾器及儲槽須加裝靜電消除裝置，並確實接地。袋濾器之濾材採導電性材質。 |
| 儲存 | 存放於陰涼處所，避免直射陽光、雨淋及急遽之溫差。儲存處嚴禁煙火。 |



奇美實業股份有限公司

台灣省台南縣仁德鄉三甲村59-1號 電話：886-6-266-5000, 傳真：886-6-266-5555-7

2/2(A-GIIE)

8. 暴露預防措施

| | |
|-----------|---|
| 容許濃度(TLV) | 未定 |
| 通風設備 | 排除粉塵、煙及氣體時使用 |
| 個人防護設備 | 呼吸防護 清洗成型機時使用防毒面具。 手部防護 接觸熔膠時使用皮手套。 眼睛防護 平時使用安全眼鏡，清洗成型機時使用護目鏡 |

9. 物理及化學性質

| | |
|----------|----------------------------|
| 物質狀態 | 米白色膠粉 |
| 形狀 | 粒狀 |
| 顏色 | 米白色 |
| 氣味 | 無 |
| 閃火點 | 404 °C |
| 自燃溫度 | 466 °C |
| 爆炸界限 | 45 g/m ³ |
| 最小著火能量 | 3.8 mJ |
| 最大爆炸壓力 | 7 × 10 ⁵ Pa |
| 最大壓力上升速度 | 8.2 × 10 ⁷ Pa/S |
| 比重 | 1.03-1.10 |
| 溶解度 | 無 |

10. 安定性及反應性

| | |
|--------|--|
| 安定性 | 依一般操作及儲存程序時，安定性佳。 |
| 危害性分解物 | CO, HCN, AN, SM and NO |
| 燃燒能量 | 3.53 × 10 ⁷ J/kg (8424 Kcal/kg) |

11. 毒性資料

| | |
|-----|----------------------|
| 刺激性 | 分解後之塑膠所產生的煙及蒸氣會刺激眼睛。 |
|-----|----------------------|

12. 生態資料

為防止被海洋生物或鳥類攝食，嚴禁丟棄至海洋或水域。

13. 廢棄物處理

適當之焚化爐燃燒或掩埋法。不適當之焚化爐可能會產生有毒氣體如 CO, HCN, AN and SM.

14. 運送資料

未分類

15. 法規資料

無

16. 其他資料

無

CHI MEI CORPORATION

59-1 SAN CHIA JEN TE TAINAN HSIEN TAIWAN

Material Designation: **PA-757 (+)**

Product Description: Acrylonitrile Butadiene Styrene (ABS), designated "Polylac" furnished as pellets.

| Color | Min. Thick. (mm) | Flame Class | HWI | HAI | RTI Elec | RTI Imp | RTI Str | IEC GWIT | IEC GWFI |
|---|-------------------|--|-----|-----|--|---------|--|----------------------------------|----------|
| ALL | 1.5 | HB | 4 | 0 | 85 | 80 | 85 | - | - |
| | 3.0 | HB | 3 | 0 | 85 | 80 | 85 | - | - |
| CTI: 0 | IEC CTI: - | HVTR: 1 | | | D495: 1 | | | IEC Ball Pressure (°C): - | |
| Dielectric Strength (kV/mm): - | | Volume Resistivity (10¹⁰ohm-cm): - | | | Dimensional Stability(%): - | | ISO Heat Deflection (°C): - | | |
| ISO Tensile Strength (MPa): - | | ISO Flexural Strength (MPa): - | | | ISO Charpy Impact (kJ/m²): - | | ISO Izod Impact (kJ/m²): - | | |
| ISO Tensile Impact (kJ/m²): - | | ISO Izod Impact (kJ/m²): - | | | | | | | |

(+) Optional prefix or suffix may be used to denote 0-0.5% acid scavengers.

Report Date: 6/23/1983

Underwriters Laboratories Inc®

UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in components and parts of end-product devices and appliances, where the acceptability of the combination is determined by

ULI.



CHI MEI CORPORATION

59-1 SAN CHIA, JEN TE, TAINAN COUNTY, TAIWAN R.O.C.

TEL: 886-6-266-5000,

FAX: 886-6-266-5617

Data issued: May 25, 2003

We hereby certify that the follow Polylac ABS resin (list as follow) produced by Chi Mei Corporation

| | |
|-------------------|---|
| GP-Grade | PA-707, PA-757, PA-717C, PA-727, PA-747, PA-709, |
| HF-Grade | PA-756, PA-756S, PA-756H, PA-756B, PA-716, PA-746, PA-746H, PA-737 |
| Extrusion Grade | PA-747F, PA-747R, PA-747S, PA-709S |
| HH-Grade | PA-777B, PA-777D, PA-777E |
| Transparent Grade | PA-758 |

conforms to the requirement that no chemicals as following are added.

1. PBBEs (Poly Bromo Bisphenyl Ethers)
2. PBBs (Poly Bromo Bisphenyls)
3. Ozone Depleting Chemicals(CFC's&HCFC'S)
4. Chlorinated Paraffin (C10-C13)
5. Polyvinyl Chloride (PVC)
6. Mercury(Hg) and its compounds,
7. Lead(Pb) and its compounds,
8. Cadmium(Cd) and its compounds,
9. Chromium(Cr) and its compounds,
10. Arsenic(As) and its compounds,
11. Antimony(Sb) and its compounds,
12. Selenium(Se) and its compounds,
13. Barium(Ba) and its compounds,
14. Chromium(Cr) VI and its compounds
15. Organic tin compounds
16. Polychlorinated Biphenyls(PCB's) and Terphenyls(PCT's)
17. Poly naphthalenes
18. Azo compounds
19. Polychlorinated biphenyl
20. Polychlorinated naphthalene
21. Asbestos
22. Phthalates

With regard to composition of above grade, they can comply with the Directives of RoHS (2002/95/EC), 2003/11/EC, TCO'99, Blue Angel and SONY (SS-00259)

Sincerely Yours,

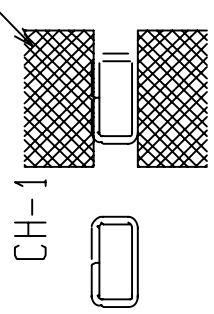
Eric Chou

Manager

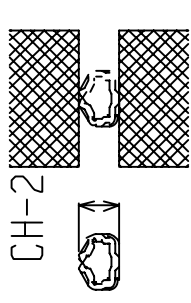
Department of Product Strategy & Service

This statement is based on our current level of knowledge and covers the above resins as supplied by CHI MEI CORPORATION at the date of issue. Since conditions of use are outside CHI MEI CORPORATION's control, CHI MEI CORPORATION makes no warranties, express or implied, and assumes no liability in connection with any use of this information.

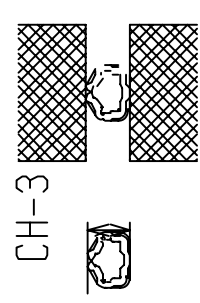
| ※ NOTE-1 Single / 1重組 | ※ NOTE-1 Single / 1重組 | ※ NOTE-1 Double / 2重組 | ※ NOTE-1 Single / 1重組 |
|---|---|---|---|
| 90187-008C ----- 90213-008C | 90187-013C ----- 90213-013C | 90187-032C ----- 90213-032C | 90233-018 ----- 90232-018 |
| | | | |
| | | | |
| 1.34~1.40 ----- 0.76~0.84 ----- 0.85~0.97 | 1.34~1.40 ----- 1.06~1.14 ----- 1.15~1.35 | 1.34~1.40 ----- 1.20~1.30 ----- 1.26~1.46 | 1.34~1.40 ----- 1.41~1.49 ----- 1.70~1.80 |



i-fit pa



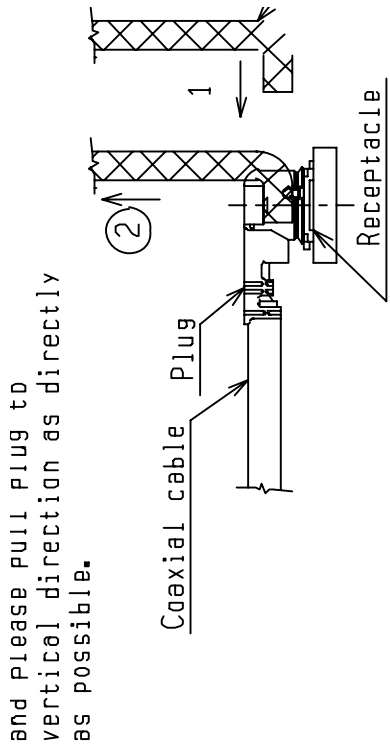
Outer co



Jacket F

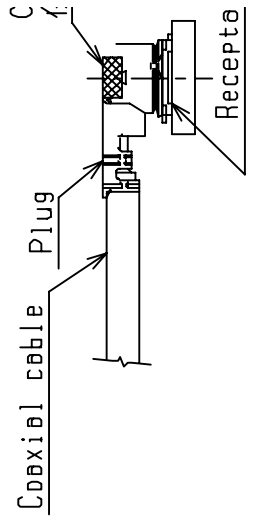
Crimp

障体への半田コーティングは不可
 se solder coated



and please pull plug to vertical direction as directly as possible.

(2) In case of unmating directly by hand
Please catch the catching area of plug, and please pull plug to vertical direction as directly as possible.



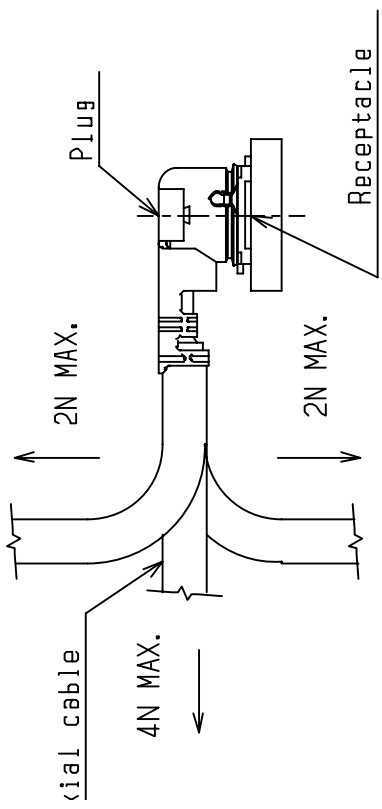
5-3 Crimp over standards of outer conductor

Standards: Less than 10% from total numbers of outer conductor
(Numbers of outer conductor's crimp over from outer conductor's barrel)

5-4 Caution about Heat shrinkage tubes

Please be careful not to melt housing when using heat shrinkage tubes.
It will become cause of open circuit.

- 1. 金メッキ0.1μm MIN.
下地 ニッケル1.27μm MIN.
- 2. 金メッキ0.05μm MIN.
下地 ニッケル1.27μm MIN.
- 3. かん相手 Part No. : 20279-001E-01
- 4. コネクタかん合後のケーブルに対する荷重

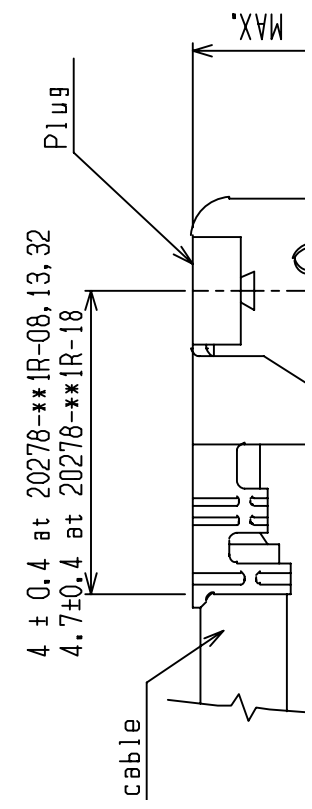


5. コネクタかん合時および抜去時の注意

5-1 コネクタ挿入時
PlugとReceptacleのかん合軸を合わせ、できるだけ垂直に挿入して下さい。
極端な斜め挿入は行わないで下さい。
コネクタ破損の原因となりますので、過度なこじり挿抜は行わないで下さい。

ing & unmating

ector straightly
on as much as
the mating axis
le.
ngle mating may
, please don't



Date :

Our Spec. No. WS03-M051

MESSRS.

SPECIFICATION
FOR
HIGH FREQUENCY COAXIAL CABLE
" KHCX - 32AWG - SB - TA "

SHOWA ELECTRIC WIRE & CABLE CO., LTD.

TORANOMON

TOKYO JAPAN

James Huang

LANTRRA INDUSTRIAL CO., LTD.
F.14, NO. 92, SHING TEH ROAD,
SAN CHUNG, TAIPEI, TAIWAN
TEL:886-2-8511-1178
FAX:886-2-8511-1179
Email:sales@lanterra.com.tw
www.lanterra.com.tw
www.terraview.com.tw

T. Mori

T. Mori
Manager, Engineering Section
Engineering Dept.
Electronic Wire Business Unit

材質證明-Coaxial Cable (for SGS-Coaxial Cable KHCX-32AWG-SB-TA CE/2005/34307)

Our Spec. No. WS03-M051 (1/2)

1. 適用(SCOPE)

本仕様書は電子機器などの内部配線に使用される細径同軸“KHCX-32AWG-SB-TA”の構造と特性について定める。

This specification covers the construction and characteristics of coaxial cable “KHCX-32AWG-SB-TA” for internal wiring of electronic equipment.

2. ケーブル型名の説明 (EXPLANATION OF CABLE TYPE)

KHCX-32AWG-SB-TA

(1) (2) (3)

(1) ケーブル略称 (Cable Abbreviation)

(2) 導体サイズ (Conductor Size)

(3) 外部導体タイプ (Outer Conductor Type)

3. 構造(CONSTRUCTION)

| 項目 Item | | 要求特性 Requirement |
|--------------------------|-----------------|---|
| 内部導体 Inner conductor | 材質 Material | 銀めっき軟銅線 Silver coated annealed copper wire |
| | 構成 Stranding | 7/0.08mm |
| | 外径 Diameter | 標準 0.24mm Nom. 0.24mm |
| 絶縁体 Insulation | 材質 Material | FEP |
| | 色別 Color | 自然色 Natural |
| | 厚さ Thickness | 標準 0.22mm Nom. 0.22mm |
| | 外径 Diameter | 標準 0.68mm Nom. 0.68mm |
| 外部導体 Outer conductor | 材質 Material | 錫めっき軟銅線 Tinned annealed copper wire braid shield |
| | 構成 Stranding | 16/4/0.05 mm |
| シース Sheath | 材質 Material | FEP |
| | 色別 Color | 灰・白・黒 Gray・White・Black |
| | 厚さ Thickness | 標準 0.10mm Nom. 0.10mm |
| 仕上外径 Overall diameter | | 標準 1.13mm Nom. 1.13mm |
| 概算質量 Approximate mass | | 3 kg/km |

4. 電気特性(20℃) (ELECTRICAL CHARACTERISTICS at 20 degree)

| 項目 Item | 単位 Unit | 要求特性 Requirements |
|---------------------------------------|---------------|--|
| 導体抵抗 Conductor Resistance | Ω /km | 520 以下 Max. 520 |
| 絶縁抵抗 Insulation Resistance | M Ω km | 1,500 以上 (DC 500V 1 分間充電後) Min. 1,500 (After charge DC 500V for 1 min.) |
| 耐電圧 Dielectric Strength | V/1min. | AC 1,000 |
| 静電容量 Capacitance | pF/m | 標準 97 (at 1kHz) Nom. 97 (at 1kHz) |
| 特性インピーダンス Characteristic Impedance | Ω | 標準 50 (TDR にて測定) Nom. 50 (at TDR) |

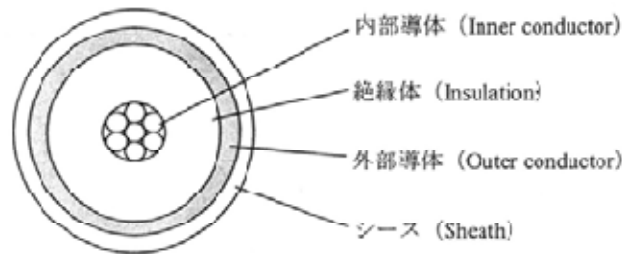


図 1. ケーブル構造図

Fig.1. Cable Cross-Section

5. 梱包及び荷札の表示 (PACKING AND MARKING ON TAG)

完成品は運送中及び保管中に損傷を生じぬ荷造りをする。

また、荷札の表示は以下の通りとする。

The completed cables shall be coiled and packing in such a manner as to be adequately protected from damage during packing, shipping, and normal handling.

The following items shall be marked in the Tag which is attached to the products.

- 1) 品名 (Type of Cable)
- 2) 導体サイズ (Conductor size)
- 3) 条長 (Length)
- 4) 製造者名または略称 (Manufacturer's name or trade mark)
- 5) 製造年月 (The year and month of manufacture)

なお、完成品にはジョイントを有する場合がある。その場合は条長明細を記載する。

Note : The spool may contain joints. In that case, the detail of length is indicated.

RoHS REPORT INDEX-RFA-02-C2H1-06-50-白

| | NAME | 供應商 | RoHS report |
|-----|---------------------------------|--|----------------|
| 1 | ANTENNA HOUSING/HINGE-ABS PA757 | CHI MEI CORPORATION | KA/2007/10032 |
| 2 | IPEX | IPEX JP. CO., LTD. | CS/2006/90209 |
| 3 | COAXIAL CABLE KHCX-Ø1.13 | | |
| 3-1 | GRAY PLASTIC JACKET | SWCC SHOWA DEVICE TECHNOLOGY CO., LTD. | CE/2006/B3245 |
| 3-2 | SILVER COLORED METAL FOIL | SWCC SHOWA DEVICE TECHNOLOGY CO., LTD. | CE/2006/B3239C |
| 3-3 | TRANSPARENT PLASTIC | SWCC SHOWA DEVICE TECHNOLOGY CO., LTD. | CE/2006/B3239A |
| 3-4 | SILVER COLORED METAL WIRE | SWCC SHOWA DEVICE TECHNOLOGY CO., LTD. | CE/2006/B3239B |



Test Report

No. KA/2007/10032 Date: 2007/10/9 Page 2 of 6

CHI MEI CORPORATION
 NO.89-1 SAN-LIA VILLAGE, PENDE TOWNSHIP, TAINAN COUNTY 717, TAIWAN
 (R.O.C.)



Test results by chemical method (Unit: mg/kg):

| Test Item (s): | Method (Refer to) | Result | MDL |
|---|----------------------|--------|-----|
| | | No.1 | |
| Cadmium (Cd) | (1) | n.d. | 2 |
| Lead (Pb) | (2) | n.d. | 2 |
| Mercury (Hg) | (3) | n.d. | 2 |
| Hexavalent Chromium (Cr(VI)) by alkaline extraction | (4) | n.d. | 2 |
| Sum of PBBs | (5) | n.d. | - |
| Mono-bromobiphenyl | | n.d. | 5 |
| Di-bromobiphenyl | | n.d. | 5 |
| Tri-bromobiphenyl | | n.d. | 5 |
| Tetra-bromobiphenyl | | n.d. | 5 |
| Penta-bromobiphenyl | | n.d. | 5 |
| Hexa-bromobiphenyl | | n.d. | 5 |
| Hepta-bromobiphenyl | | n.d. | 5 |
| Octa-bromobiphenyl | | n.d. | 5 |
| Nona-bromobiphenyl | | n.d. | 5 |
| Deca-bromobiphenyl | | n.d. | 5 |
| Sum of PBDEs (Mono to Nona)(Note 4) | | n.d. | - |
| Mono-bromobiphenyl ether | | n.d. | 5 |
| Di-bromobiphenyl ether | | n.d. | 5 |
| Tri-bromobiphenyl ether | | n.d. | 5 |
| Tetra-bromobiphenyl ether | | n.d. | 5 |
| Penta-bromobiphenyl ether | | n.d. | 5 |
| Hexa-bromobiphenyl ether | | n.d. | 5 |
| Hepta-bromobiphenyl ether | | n.d. | 5 |
| Octa-bromobiphenyl ether | | n.d. | 5 |
| Nona-bromobiphenyl ether | n.d. | 5 | |
| Deca-bromobiphenyl ether | n.d. | 5 | |
| Sum of PBDEs (Mono to Deca) | n.d. | - | |

TEST PART DESCRIPTION:

NO.1 : BLACK PLASTIC PELLETS

This report is valid only for the purpose and conditions stated herein. It is not to be used for any other purpose without the prior written consent of SGS Taiwan Ltd. The client is responsible for the accuracy of the information provided. The results are based on the samples received and tested. The client is responsible for the accuracy of the information provided. The results are based on the samples received and tested.

94107707



Test Report

No. KA2005710032 Date: 20070109 Page 5 of 5

CHIME CORPORATION
NO. 89-1 SANJIA VILLAGE, RENDE TOWNSHIP, TAINAN COUNTY 717, TAIWAN
(R.O.C.)



- Note: 1. mg/kg = ppb
 2. n.d. = Not Detected
 3. MDL = Method Detection Limit
 4. Sum of Mono to NonaBDE & according to 2005-717-ED DecaBDE is exempt
 5. * = Not Regulated

本報告係根據客戶提供之樣品，經 SGS 檢驗所進行分析，其結果僅供參考，不具法律責任。如有任何爭議，請與 SGS 檢驗所洽詢。本報告之內容，僅限於客戶提供之樣品，不適用於其他任何用途。本報告之內容，僅限於客戶提供之樣品，不適用於其他任何用途。本報告之內容，僅限於客戶提供之樣品，不適用於其他任何用途。

TW01 20070109

00001

Test Report

No. KA/2007/10032 Date 2007/01/05 Page 5 of 5

CHI MEI CORPORATION
NO.59-1, SANJIA VILLAGE, BENDI TOWNSHIP, TAINAN COUNTY 717, TAIWAN
(R.O.C.)



** End of Report **

Survey Report

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA CITY TOKYO 194
0013 JAPAN

Report No : CS/2006/90209

Date : 2006/09/22

Page : 1 of 4



The following sample(s) was/were submitted and identified by/ on behalf of the client as :

Sample Description : MIF PLUG SERIE CONNECTOR
Style/Item No : 20278 111R 08, 20278 111R 13, 20278 111R 32, 20278 111R 18

Test Result(s) : Please see the next page(s)

^AThis report is combined with 4 copies of test reports which hereby certified by SGS through the verification of each above certification provided by client.^A


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

Survey Report

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA CITY TOKYO 194
0013 JAPAN

Report No : CS/2006/90209

Date : 2006/09/22

Page : 2 of 4



Test Result(s)

PART NAME NO.1 : GOLDEN COLORED METAL(CE/2005/A0701)
PART NAME NO.2 : GOLDEN COLORED METAL(CE/2005/96053)
PART NAME NO.3 : BLACK PLASTIC(CE/2005/96055)
PART NAME NO.4 : WHITE PLASTIC(CE/2006/60388)

| Test Item(s): | Unit | Method | MDL | Result | | | |
|--------------------|------|--|-----|---------|---------|------|------|
| | | | | NO.1 | NO.2 | NO.3 | NO.4 |
| Chromium VI (Cr+6) | ppm | UV-VIS after reference to US EPA 3060A. | 2 | N.D. | N.D. | N.D. | N.D. |
| Gold (Au) | ppm | ICP-AES after reference to US EPA 3050B or other acid digestion. | 2 | 1155.0 | 3783.9 | --- | --- |
| Cadmium (Cd) | ppm | ICP-AES after reference to EN 1122, method B:2001 or other acid digestion. | 2 | N.D. | N.D. | N.D. | N.D. |
| Mercury (Hg) | ppm | ICP-AES after reference to US EPA 3052 or other acid digestion. | 2 | N.D. | N.D. | N.D. | N.D. |
| Nickel (Ni) | ppm | ICP-AES after reference to US EPA 3050B or other acid digestion. | 2 | 25445.3 | 33433.8 | --- | --- |
| Lead (Pb) | ppm | ICP-AES after reference to US EPA 3050B or other acid digestion. | 2 | 17.4 | 18.7 | 23.5 | 38.8 |

Survey Report

I-PEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA CITY TOKYO 194
0013 JAPAN

Report No : CS/2006/90209

Date : 2006/09/22

Page : 3 of 4



| Test Item(s): | Unit | Method | MDL | Result | | | |
|---|------|---|--------|--------|------|------|------|
| | | | | NO.1 | NO.2 | NO.3 | NO.4 |
| Monobromobiphenyl | % | With reference to USEPA3540C. 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. | N.D. |
| Dibromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Tribromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Tetrabromobiphenyl | % | | 0.0005 | | | N.D. | N.D. |
| Pentabromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Hexabromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Heptabromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Octabromobiphenyl | % | | 0.0005 | | | N.D. | N.D. |
| Nonabromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Decabromobiphenyl | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Total PBEs (Polybrominated biphenyls)/Sum of above | % | | - | --- | --- | N.D. | N.D. |
| Monobromobiphenyl ether | % | With reference to USEPA3540C. 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. | N.D. |
| Dibromobiphenyl ether | % | | 0.0005 | | | N.D. | N.D. |
| Tribromobiphenyl ether | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Tetrabromobiphenyl ether | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Heptabromobiphenyl ether | % | | 0.0005 | | | N.D. | N.D. |
| Hexabromobiphenyl ether | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Octabromobiphenyl ether | % | | 0.0005 | --- | --- | N.D. | N.D. |
| Nonabromobiphenyl ether | % | | 0.0005 | | | N.D. | N.D. |
| Decabromobiphenyl ether | % | | 0.0005 | | | N.D. | N.D. |
| Total PBDEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above | % | | - | --- | --- | N.D. | N.D. |
| Total of Mono to Nona-brominated biphenyl ether. (Note 4) | % | | | | | N.D. | N.D. |

- NOTE: (1) N.D. = Not Detected (<MDL)
 (2) ppm = mg/kg
 (3) MDL = Method Detection Limit
 (4) Decabromodiphenyl ether (DecaBDE) in polymeric applications is exempted by Commission Decision of 13 Oct. 2005 amending Directive 2002/95/EC notified under document 2005/717/EC.
 (5) PBDEs=PBDEs=Polybrominated Diphenyl Ethers=PBDOs=PBBOs.
 (6) " - " = Not Regulation
 (7) " --- " = Not Applicable

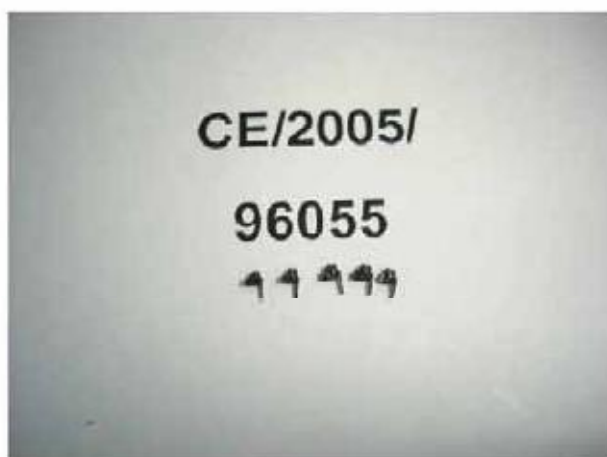
Survey Report

I-FEX JP CO., LTD.
6-27-19 HARAMACHIDA MACHIDA-CITY TOKYO 194-
0013 JAPAN

Report No : CS/2006/90209

Date : 2006/09/22

Page : 4 of 4



** End of Report **



Test Report

No : CH/2006/B3243 Date : 2006/11/21 Page: 1 of 3

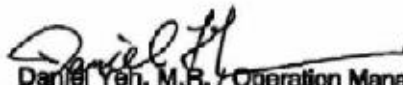
SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



Report on the submitted sample said to be ANTENNA COAXIAL CABLE UL-STYLE 11032.

Style/Item No : FOR KHCX-32AWG-SB-TA / KHCX-32AWG-WSB-TA /
KHCX-30AWG-SB-TA KHCX-36AWG-SB-TA GRAY
Sample Receiving Date : 2006/11/14
Testing Period : 2006/11/14 TO 2006/11/21

=====
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.
Test Method : (1) With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.
(2) With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.
(3) With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.
(4) With reference to US EPA Method 3060A & 7106A for Hexavalent Chromium. Analysis was performed by UV/Vis Spectrometry
(5) With reference to US EPA 3540C for PBB/PBDE Content. Analysis was performed by GC/MS and screening via US EPA 3550C with HPLC/DAD/MS.
Test Result(s) : Please refer to next page(s).


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

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Test Report

No. : CE/2008/B3245 Date : 2008/11/21 Page: 2 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO KU, TOKYO
105-8414



Test results by chemical method (Unit: mg/kg)

| Test Item (s): | Method (Refer to) | Result | MDL |
|---|-------------------|--------|-----|
| | | No.1 | |
| Cadmium (Cd) | (1) | n.d. | 2 |
| Lead (Pb) | (2) | n.d. | 2 |
| Mercury (Hg) | (3) | n.d. | 2 |
| Hexavalent Chromium (CrVI) | (4) | n.d. | 2 |
| Sum of PBBs | (5) | n.d. | - |
| Monobromobiphenyl | | n.d. | 5 |
| Dibromobiphenyl | | n.d. | 5 |
| Tribromobiphenyl | | n.d. | 5 |
| Tetrabromobiphenyl | | n.d. | 5 |
| Pentabromobiphenyl | | n.d. | 5 |
| Hexabromobiphenyl | | n.d. | 5 |
| Heptabromobiphenyl | | n.d. | 5 |
| Octabromobiphenyl | | n.d. | 5 |
| Nonabromobiphenyl | | n.d. | 5 |
| Decabromobiphenyl | | n.d. | 5 |
| Sum of PBDEs (Mono to Nona) (Note 4) | | n.d. | - |
| Monobromobiphenyl ether | | n.d. | 5 |
| Dibromobiphenyl ether | | n.d. | 5 |
| Tribromobiphenyl ether | n.d. | 5 | |
| Tetrabromobiphenyl ether | n.d. | 5 | |
| Pentabromobiphenyl ether | n.d. | 5 | |
| Hexabromobiphenyl ether | n.d. | 5 | |
| Heptabromobiphenyl ether | n.d. | 5 | |
| Octabromobiphenyl ether | n.d. | 5 | |
| Nonabromobiphenyl ether | n.d. | 5 | |
| Decabromobiphenyl ether | n.d. | 5 | |
| Sum of PBDEs (Mono to Deca) | n.d. | - | |

Test Part Description:

NO.1 GRAY PLASTIC JACKET

Note : 1. mg/kg ppm

2. n.d. Not Detected

3. MDL Method Detection Limit

4. Sum of Mono to NonaBDE & according to 2005/717/EC DecaBDE is exempt.

5. "-" = Not Regulated

Test Report

No : CE/2006/B3245 Date : 2006/11/21 Page: 3 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



** End of Report **

Test Report

No : CE/2006/B3239C Date : 2006/11/28 Page: 1 of 3


SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



Report on the submitted sample said to be ANTENNA COAXIAL CABLE UL-STYLE 11032.

Style/Item No : KHCX-32AWG-SB-TA KHCX-32AWG-WSB-TA
KHCX-30AWG-SB-TA KHCX-36AWG-SB-TA
Sample Receiving Date : 2006/11/14
Testing Period : 2006/11/14 TO 2006/11/21

=====
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.
Test Method : (1) With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.
(2) With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.
(3) With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.
(4) With reference to US EPA Method 3060A & 7196A for Hexavalent Chromium. Analysis was performed by UVMis Spectrometry.
Test Result(s) : Please refer to next page(s).


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

Test Report

No : CE/2006/B3239C Date : 2006/11/28 Page: 2 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
 NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
 105-8444



Test results by chemical method (Unit: mg/kg)

| Test Item (s): | Method (Refer to) | Result | MDL |
|----------------------------|----------------------|--------|-----|
| | | No.1 | |
| Cadmium (Cd) | (1) | n.d. | 2 |
| Lead (Pb) | (2) | n.d. | 2 |
| Mercury (Hg) | (3) | n.d. | 2 |
| Hexavalent Chromium (CrVI) | (4) | n.d. | 2 |

Test Part Description:

NO.1 : SILVER COLORED METAL FOIL

- Note : 1. mg/kg = ppm
 2. n.d. = Not Detected
 3. MDL = Method Detection Limit

Test Report

No : CE/2006/B3239C Date : 2006/11/28 Page: 3 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



** End of Report **

Test Report

No : CE/2006/B3239A Date : 2006/11/28 Page: 1 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



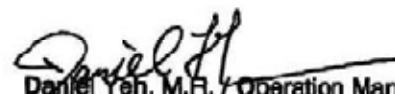
Report on the submitted sample said to be ANTENNA COAXIAL CABLE UL-STYLE 11032.

Style/Item No : KHCX-32AWG-SB-TA KHCX-32AWG-WSB-TA
KHCX-30AWG-SB-TA KHCX-36AWG-SB-TA
Sample Receiving Date : 2006/11/14
Testing Period : 2006/11/14 TO 2006/11/21

=====
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : (1) With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.
(2) With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.
(3) With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.
(4) With reference to US EPA Method 3060A & 7198A for Hexavalent Chromium. Analysis was performed by UV/Vis Spectrometry.
(5) With reference to US EPA 3540C for PBB/PBDE Content. Analysis was performed by GC/MS and screening via US EPA 3650C with HPLC/DAD/MS.

Test Result(s) : Please refer to next page(s).


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

Test Report

No : CE/2006/B3239A Date : 2006/11/28 Page: 2 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



Test results by chemical method (Unit: mg/kg)

| Test Item (s): | Method (Refer to) | Result | MDL |
|---|----------------------|--------|-----|
| | | No.1 | |
| Cadmium (Cd) | (1) | n.d. | 2 |
| Lead (Pb) | (2) | n.d. | 2 |
| Mercury (Hg) | (3) | n.d. | 2 |
| Hexavalent Chromium (CrVI) | (4) | n.d. | 2 |
| Sum of PBBs | (5) | n.d. | - |
| Monobromobiphenyl | | n.d. | 5 |
| Dibromobiphenyl | | n.d. | 5 |
| Tribromobiphenyl | | n.d. | 5 |
| Tetrabromobiphenyl | | n.d. | 5 |
| Pentabromobiphenyl | | n.d. | 5 |
| Hexabromobiphenyl | | n.d. | 5 |
| Heptabromobiphenyl | | n.d. | 5 |
| Octabromobiphenyl | | n.d. | 5 |
| Nonabromobiphenyl | | n.d. | 5 |
| Decabromobiphenyl | | n.d. | 5 |
| Sum of PBDEs (Mono to Nona) (Note 4) | | n.d. | - |
| Monobromobiphenyl ether | | n.d. | 5 |
| Dibromobiphenyl ether | | n.d. | 5 |
| Tribromobiphenyl ether | | n.d. | 5 |
| Tetrabromobiphenyl ether | | n.d. | 5 |
| Pentabromobiphenyl ether | | n.d. | 5 |
| Hexabromobiphenyl ether | | n.d. | 5 |
| Heptabromobiphenyl ether | | n.d. | 5 |
| Octabromobiphenyl ether | | n.d. | 5 |
| Nonabromobiphenyl ether | n.d. | 5 | |
| Decabromobiphenyl ether | n.d. | 5 | |
| Sum of PBDEs (Mono to Deca) | n.d. | - | |

Test Part Description:

NO.1 : TRANSPARENT PLASTIC

- Note :
1. mg/kg = ppm
 2. n.d. = Not Detected
 3. MDL = Method Detection Limit
 4. Sum of Mono to NonaBDE & according to 2005/717/EC DecaBDE is exempt.
 5. "-" = Not Regulated

Test Report

No : CE/2006/B3239A Date : 2006/11/28 Page: 3 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



** End of Report **

Test Report

No : CE/2006/B3239B Date : 2006/11/23 Page: 1 of 3

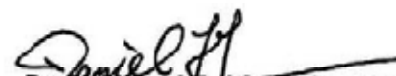
SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



Report on the submitted sample said to be ANTENNA COAXIAL CABLE UL-STYLE 11032.

Style/Item No : KHCX-32AWG-SB-TA KHCX-32AWG-WSB-TA
KHCX-30AWG-SB-TA KHCX-36AWG-SB-TA
Sample Receiving Date : 2006/11/14
Testing Period : 2006/11/14 TO 2006/11/21

=====
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.
Test Method : (1) With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.
(2) With reference to US EPA Method 3050B for Lead Content. Analysis was performed by ICP-AES.
(3) With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.
(4) With reference to US EPA Method 3060A & 7198A for Hexavalent Chromium. Analysis was performed by UVMis Spectrometry.
Test Result(s) : Please refer to next page(s).


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

Test Report

No : CE/2006/B3239B Date : 2006/11/28 Page: 2 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



Test results by chemical method (Unit: mg/kg)

| Test Item (s): | Method (Refer to) | Result | MDL |
|----------------------------|----------------------|--------|-----|
| | | No.1 | |
| Cadmium (Cd) | (1) | n.d. | 2 |
| Lead (Pb) | (2) | n.d. | 2 |
| Mercury (Hg) | (3) | n.d. | 2 |
| Hexavalent Chromium (CrVI) | (4) | n.d. | 2 |

Test Part Description:

NO.1 : SILVER COLORED METAL WIRE

- Note : 1. mg/kg = ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit

Test Report

No : CE/2006/B3239B Date : 2006/11/28 Page: 3 of 3

SWCC SHOWA DEVICE TECHNOLOGY CO., LTD.
NO. 1-8, TORANOMON 1-CHOME, MINATO-KU, TOKYO
105-8444



** End of Report **

DESCRIPTION : Swivel Access Point Antenna

MODEL NO : RFA-02-C2H1-06-50-白

1.1 ELECTRICAL

Frequency Range: 2400~2500 MHZ

Gain: 2.0dBi

VSWR: ≤ 2

Polarization: Linear, Vertical

Impedance : 50 Ω

Connector: IPEX MHF

Cable: \varnothing 1.13mm

1.2 MECHANICAL

Condition : Non operating during test.

Material : PCABS(UL94V-0)

Endurance

Number of 90° rotation of the connector: 1000 cycles (min.)

Mandatory : Guaranty of functionalities after test.

Bending: Number of 90° at the hinge parts and bending on one direction with 1 kg force : 1000 cycles

Mandatory : No mechanical damage tolerated. Guaranty of functionalities after test.

Antenna resistance

Tests are applicable to all parts and both sides.

Traction: Traction force applied 3 times on plugs during 15 second : 5 kg

Mandatory : No mechanical damage tolerated. Guaranty of functionalities after test.

1.3 ENVIROMENTAL

Storage

Condition : Non operating during test.

Cold: -40 $^{\circ}$ C during 72h (IEC 68-2-1 standard Ab/Ad test)

Dry heat: +80 $^{\circ}$ C during 96h (IEC 68-2-2 standard Bb/Bd test)

Humidity: +40 $^{\circ}$ C at 95%R.H. during 4 days (IEC 68-2-56 standard Cb test)

Mandatory : No mechanical or visible damage tolerated. Guaranty of functionalities after test.

Operation

Condition : Operating during test.

Cold: -10 $^{\circ}$ C during 48h (IEC 68-2-1 standard Ab/Ad test)

Dry heat: +55 $^{\circ}$ C during 48h (IEC 68-2-2 standard Bb/Bd test)

Composite: -10 $^{\circ}$ C to +55 $^{\circ}$ C 95%R.H 4 cycles(IEC 68-2-30 standard Nb test)

Mandatory : No mechanical or visible damage tolerated. Guaranty of functionalities during and after test.