



鴻呈實業股份有限公司
台北縣中和市中正路880號7樓
TEL：886-2-32343038
FAX：886-2-32343056
www.vso.com.tw

鴻呈電子（蘇州）有限公司
蘇州市吳中區甪直鎮甫澄中路365號
TEL：86-512-65022297
FAX：86-512-65022997
www.vso.com.tw

CUSTOMER:

(客 户) ADVANTECH

CUSTOMER NO: 1700018785
(客 户 料 号)

(品 名 规 格) SATA 15P TO 1*4P CABLE

COMPANY NO: 23G-0591
(公 司 料 号)

APPROVED NO: B2015110004
(承 认 书 编 号)

SAMPLE DATE: 2019.05.12 REVISION: X1
(送 样 日 期) (版 本)

APPROVED BY (核准)	AUDITING BY (审核)	CHECKED BY (校对)	MADE BY (制作)
			DXY

FM-E016 V.02

VSO Electronics Co., Ltd
鴻呈電子（蘇州）有限公司
工程/產品變更通知單PCN

序号：N201905025

申请日期：2019-5-12	对应窗口：DXY	通知单位：研华
变更主旨：承認書更新		对应客方料号：1700018785
变更说明：線材增加第二供應商 UL 規格相同		
变更类别： ☒ 供货商 ☐ 产品参数 ☐ 制程工序 ☐ 材料参数 ☐ 产品检验方式 ☐ 制造设备、工模具、检验治具 ☐ 其他：		
變更前	變更後	
原大同廠商印字如下 印字:E54979-W 93 AWM 1007 80℃ 300V VW-I 20AWG TATUNG LL58500 CSA TR-64 90℃ FTI -F- LF (依 UL、CSA 規定 OD≤1.3mm或 28AWG 以下的线材可不印字)	增加鴻蒙UL1007 #20 印字如下 MARKING 印字: AWM 1007 E315421 VW-I 80℃ 300V () AWG HONGMENG I A FTI 80℃ 300V () AWG LM	
对应内部变更序号：ECN-N201905025 变更后是否更改料号： ☒ 否 ☐ 是； 变更后是否影响成品参数： ☒ 否 ☐ 是； 变更后是否影响成品外观： ☒ 否 ☐ 是； 产品验证报告序号：N201905025； 具体说明：		
库存状况： ☒ 无库存 ☐ 有库存，数量：____ PCS	库存处理方式： ☐ 立即变更 ☐ 其他：新投料即为新版生产方式，旧版交清后自然新版交货	
补充说明：		
		发文确认：DXY
客户确认：		客户回签处

INDEX

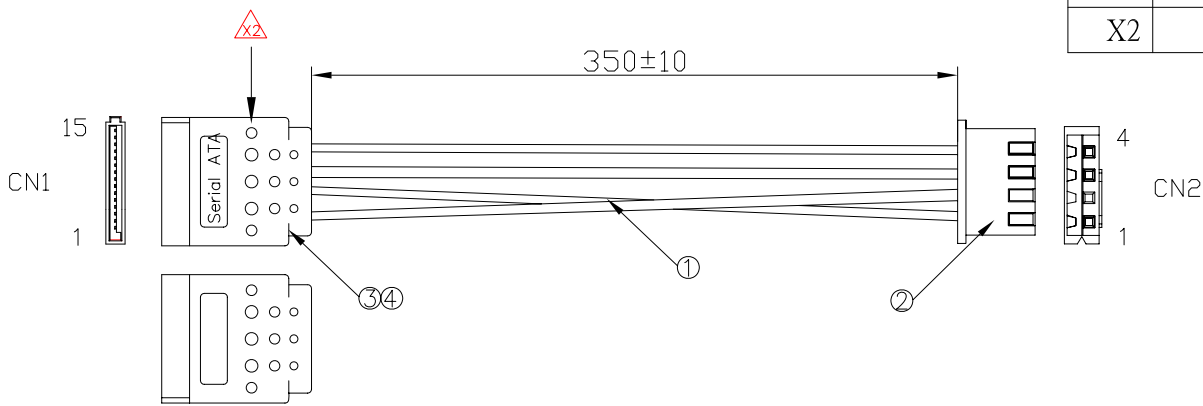
1	封面-----	第	1	頁
2	PCN-----	第	2	頁
3	目錄-----	第	3	頁
4	VSO圖面-----	第	4~5	頁
5	變更履歷-----	第	6	頁
6	CABLE 規格書，UL&材質證明&MSDS-----	第	7~32	頁
7	CONN 規格書，UL&材質證明&MSDS-----	第	33~36	頁
8	HSG&TER 規格書，UL&材質證明&MSDS-----	第	37~43	頁
9	不使用有害物質申明書-----	第	44~45	頁
10	拉力測試標準 -----	第	46	頁

THIS DRAWING IS CONTROLLED DOCUMENT FOR VSO LTD IT IS SUBJECT TO CHANGE AND THE CONTROLLING ENGINEERING ORGANIZATION SHOULD BE CONTACTED FOR THE LATEST REVISION

THIS INFORMATION IS CONFIDENTIAL AND IS DISCLOSED TO YOU ON CONDITION THAT NO FURTHER DISCLOSURE IS MADE BY YOU TO OTHER THAN VSO LTD PERSONNEL WITHOUT WRITTEN AUTHORIZATION FROM VSO LTD

Mold Number	CN1	外模:ST-SA-0005-0
	CN1	内模:ST-SA-0005-1

REVISION			
REV.	DESCRIPTION	APPROVAL	DATE
X1	郵件通知變更長度		2010.09.30
X2	外模模具增加四根定位針		2014.04.24



	CN1		CN2
13.14.15	— YELLOW —	4	
10.11.12	— BLACK —	3	
4.5.6	— BLACK —	2	
7.8.9	— RED —	1	

ELECTRONIC TEST CONDITION:
100% OPEN SHORT & MISWIRE TEST.
CONDUCTIVE RESISTANCE:3 Ω /MAX.
INSULATION RESISTANCE:10M Ω /MIN.AT DC 200V.

④	PVC	50P COLOR:BLACK<V001>	4.5g
③	CN1	SERIAL ATA 15P FEMALE CONNECTOR:CRIMP TYPE INSULATOR:BLACK CONTACT GOLD FLASH (GP)	1SET
②	CN2	1*4P HSG P=2.5mm INSULATION:WHITE TERMINAL TIN PLATED	1SET
①	CABLE	H00K-UP WIRE:UL1007 20AWG TINNED COPPER WIRE,INSULATOR: PVC YELLOW<1PC>,BLACK<2PCS>,RED<1PC> Ø1.8±0.05mm<GP>.	1SET
ITEM		DESCRIPTION	Q'TY

RoHS COMPLIANT			
CUST.PN: 研华1700018785		DRAW.:	
TITLE: SATA 15P TO 1*4P CABLE		ENGIN.:	
VSO PN:		CHECK.:	
UNITS mm	DWG. NO.: 23G-0591	REV. X2	APPR.:

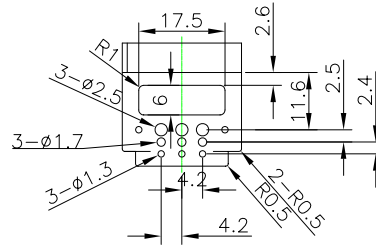
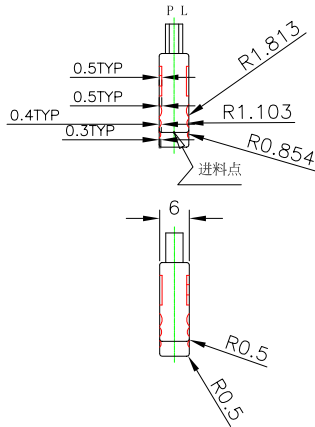
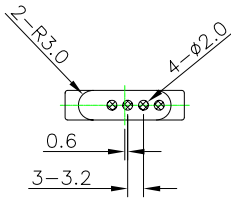
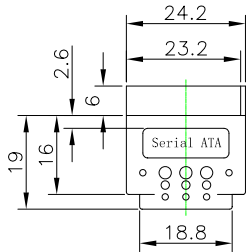
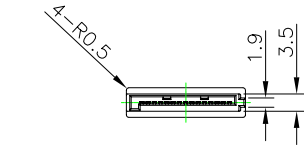
THIS DRAWING IS CONTROLLED DOCUMENT
FOR VSO LTD IT IS SUBJECT TO CHANGE
AND THE CONTROLLING ENGINEERING ORGANIZATION
SHOULD BE CONTACTED FOR THE LATEST REVISION

THIS INFORMATION IS CONFIDENTIAL AND IS DISCLOSED TO
YOU ON CONDITION THAT NO FURTHER DISCLOSURE IS MADE
BY YOU TO OTHER THAN VSO LTD PERSONNEL WITHOUT WRITTEN
AUTHORIZATION FROM VSO LTD

Mold Number	CN1	外模:ST-SA-0005-0
	CN1	内模:ST-SA-0005-1

未注尺寸公差					单位:mm
0-10	10-20	20-30	>30	角度	
±0.2	±0.3	±0.4	±0.5	±1°	

REVISION			
REV.	DESCRIPTION	APPROVAL	DATE
X1	郵件通知變更長度		2010.09.30
X2	外模模具增加四根定位針		2014.04.24



ELECTRONIC TEST CONDITION:
100% OPEN SHORT & MISWIRE TEST.
CONDUCTIVE RESISTANCE:3 Ω /MAX.
INSULATION RESISTANCE:10M Ω /MIN.AT DC 200V.

RoHS
COMPLIANT



CUST.PN: 研华1700018785		DRAW.:	
TITLE: SATA 15P TO 1*4P CABLE		ENGIN.:	
VSO PN:		CHECK.:	
UNITS mm	DWG. NO.: 23G-0591	REV. X2	APPR.:

由 Autodesk 教育版产品制作

產品開發履歷表

品名規格: *SATA 15P TO 1*4P CABLE*

圖 號: *23G-0591*

由 Autodesk 教育版产品制作

由 Autodesk 教育版产品制作

日期	版本	開發記錄	制程記錄	負責工程師
2010.09.30	X1	郵件通知變更長度		
2014.04.24	X2	外模模具增加四根定位針		

核准:

審核:
由 Autodesk 教育版产品制作

工程師:



大同电线电缆科技(吴江)有限公司

UL 1007 连接线 检验记录表

检验日期 2008 年 09 月 19 日

品 名 规 格	1007 #20-21/0.18TA			客 户	
数 量	100M	抽 样 数 量	1RL	依 据 标 准	TWSPTE0015
检 验 项 目		检 验 规 格		检 验 结 果	
导 体	材 质	镀 锡 铜 绞 线		符 合	
	构 成	21/0.18 ^{+0.005} _{-0.008} mm		21/0.176~0.181mm	
	外 径	约 0.92mm		0.92mm	
绝 缘 体	材 质	PVC		符 合	
	最 小 厚	0.331mm		0.417mm	
	外 径	1.80±0.10mm		1.80~1.81mm	
额 定 电 压 温 度		UL:80℃ 300V, CSA:90℃ 600V(peak)		符 合	
火 花 试 验		3KV/0.15sec		符 合	
绝 缘 电 阻		20℃, DC500V 10MΩ-Km 以上		符 合	
容 许 电 流		周围温度为 75℃时 6.0A		符 合	
导 体 电 阻		20℃ 40.6Ω/Km 以下		符 合	
难 燃 性		VW-1/FT-1		符 合	
绝 缘 体 常 温 引 伸		100%以上		符 合	
绝 缘 体 常 温 抗 张		1.05Kg/mm ² 以上		符 合	
绝 缘 体 老 化 引 伸		老化后(113℃, 168 小时) 老化前 65%以上		符 合	
绝 缘 体 老 化 抗 张		老化后(113℃, 168 小时) 老化前 70%以上		符 合	
印字:E54979-W AWM 1007 80℃ 300V VW-1 20AWG TATUNG LL58500 CSA TR-64 90℃ FT1 -F- LF (依 UL、CSA 规定 OD≤1.3mm 或 28AWG 以下的线材可不印字)					
判 定 :		备 考 :			

合格

主管:



检验员:





大同电线电缆科技（吴江）有限公司

电子线技术

文件类别	产品规范	标题	UL 1007 连接线 #20-21/0.18TA OD=1.8	编号	T	W	S	P	T	E	0	0	1	5
				页次	1 / 1		版本		4					

构造图:



一、构造:

项	目	规	格
导体	材质	镀锡铜绞线	
	构成	21/ 0.18	+0.005 -0.008 mm
	外径	约 0.92mm	
绝缘体	材质	PVC	
	最小度	0.331mm	
	外径	1.80 ± 0.10mm	
	色相	依客户指定	

二、特性:

项	目	规	格
额定电压	温度	UL: 80℃ 300V, CSA: 90℃ 600V (peak)	
火花试验		2KV/0.15sec	
绝缘电阻		20℃, DC500V 10 MΩ-Km 以上	
导体电阻		20℃ 40.6 Ω/Km 以下	
容许电流		周围温度为 75℃ 时 6.0A	
难燃性		VW-1/FT-1	
绝缘体常温引伸		100 % 以上	
绝缘体常温抗张		1.05 Kg/mm ² 以上	
绝缘体老化引伸		老化后 (113℃, 168 小时)	老化前 65 % 以上
绝缘体老化抗张		老化后 (113℃, 168 小时)	老化前 70 % 以上

三、印字: E54979-W AWM 1007 80℃ 300V VW-1 20 AWG TATUNG
LL58500 CSA TR-64 90℃ FT1 —F— LF
(依 UL、CSA 规定 OD ≤ 1.3mm 或 28AWG 以下的线材可不印字)

四、油墨: 外被层颜色为红、橙、黄、绿、灰、白、粉红、透明用黑色油墨印字
外被层颜色为蓝、紫、棕、黑用白色油墨印字

品保会签

制(修)订单位	制(修)订日期	制(修)订者	审 查	准	准
电子线技术	2008.08.14				

TWPMIO0001-1

分发对象: 依文件异动单



PVC 粒材质证明书

2008 年 6 月 12 日

大同电线电缆科技(吴江)有限公司

电子线品保组



材质：

一. 绝 缘 材 料

1.品 名：RSUI-40

2.制造商:大同股份有限公司桃园电线电缆厂

3.成分表:

材料种类	规格	含量 (%)
PVC RESIN	台塑 S - 70T	60%
可塑剂	TOTM	25%
综合安定剂	硬脂酸铅, 锌 (PbSt)	4%
弹性改质剂	POPPYLON P-340	5.5%
热稳定剂	TMPTNA	5.5%

4. 特 性： (1) 符合 UL VW-1 难燃规定。
(2) 不含 PBB,PBDE
(3) 不含破坏臭氧层化学物质 (依据 1989 年公告内容)

兴扬金属导体（昆山）有限公司

HOPERISE CONDUCTOR (KUN—SHAN) CO., LTD.

工厂地址：昆山市张浦镇花园路电子工业区

电话：0512-57445588

传真：0512-57456688

材质证明书



本公司铜线材质经检验符合 ASTM-B195 标准，特此证明（镀锡铜线）

元素组	元素	含量，不大于(%)	元素组总含量，不大于(%)	
1	Se	0.0002	0.0003	0.0003
	Te	0.0002		
	Bi	0.0002		
2	Cr	—	0.0015	
	Mn	—		
	Sb	0.0004		
	Cd	—		
	As	0.0005		
	P	—		
3	Pb	0.0005	0.0005	
4	S	0.0015	0.0015	
5	Ni	—	0.002	
	Fe	0.001		
	Si	—		
	Zn	—		
	Co	—		
6	Ag	0.0025	0.0025	
7	Sn	0.9	0.9	
8	Cu	99.06% ↑	99.07%	
杂质元素总含量		0.0065		

注：氧含量不大于 500ppm





**Underwriters
Laboratories Inc.®**

File E54979
Project SR289374

April 14, 2005

REPORT

on

COMPONENT - APPLIANCE WIRING MATERIAL

TATUNG CO
TAIPEI, TAIWAN

Copyright © 2005 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce this Report provided it is reproduced in its entirety.

CONCLUSION

Samples of the components covered by this Report have been found to comply with the requirements covering the category and the components are judged to be eligible for Component Recognition and Follow-Up Service. Under the service, the manufacturer is authorized to use the Recognized Marking described in the Follow-Up Service Procedure on such components which comply with said Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those components which properly bear the Recognized Marking are considered as Recognized Components by Underwriters Laboratories Inc.

Report by:
RAYMOND LIANG
Engineer

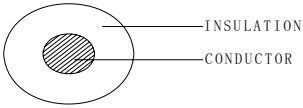
Reviewed by:
TONY HSU
Project Engineer

Any information and documentation provided to you involving UL Mark services are provided on behalf of Underwriters Laboratories Inc.

DESCRIPTION

PRODUCT COVERED:

Appliance Wiring Materials, Styles 1007, 1015, 1032, 1095, 1571 (Extruded Solid PVC insulation), and 1792 (Extruded Solid PVC insulation).

TYPE 型号			UL1007 30~16AWG TS			STANDARD 参考标准		UL1581 UL758 CAN/CSA C22.2No.210.2		
APPLICATIONS 应用			Internal wiring of electronic equipment. 电气设备内部用线							
CONSTRUCTION ITEM/ 结构项目			结构项目							
CONDUCTOR 导体	Material / 材质	-----	Soft-annealed tinned copper wire 退火镀锡铜							
	Size / 线规	AWG	30	28	26	24	22	20	18	16
	Construction/构造规格	mm	7/0.100 ±0.008	7/0.127 ±0.008	7/0.160 ±0.008	11/0.16 ±0.008	17/0.160 ±0.008	26/0.160 ±0.008	41/0.160 ±0.008	26/0.254 ±0.008
	Diameter / 外径	mm	0.30	0.38	0.48	0.61	0.76	0.94	1.17	1.49
	Resistance/电阻	Ω/Km 20℃	≤ 381	≤ 239	≤ 150	≤ 94.2	≤ 59.4	≤ 36.7	≤ 23.2	≤ 14.6
INSULATION 绝缘	Material / 材质	-----	PVC							
	Nominal Thickness/标称厚度	mm	0.38							
	Min. Thickness/最小厚度	mm	0.33							
	Diameter/外径	mm	1.10 ± 0.05	1.20 ± 0.05	1.30 ± 0.05	1.40 ± 0.05	1.60 ± 0.10	1.80 ± 0.10	2.10 ± 0.10	2.40 ± 0.10
	Color / 颜色	-----	OPTIONAL 任意							
JACKET 外被	Material / 材质	-----	/							
	Nominal Thickness/标称厚度	mm	/							
	Min. Thickness/最小厚度	mm	/							
	Diameter/外径	mm	/							
	Color/颜色	-----	/							
Electric characters/电气特性				Physical Characters/物理特性						
1	Temperature rating (额定温度)	℃	80℃	Conditioning 老化条件: 121℃±2.0/168h		Insulation 绝缘		Jacket 护套		
2	Voltage rating (额定电压)	V	300V	Before Aging 老化前	Ultimate Elongation (伸长率)	≥100%				
3	Conductor resistance (导体电阻)	Ω/Km 20℃	/		Tensile Strength (抗张强度)	≥1.05kgf/mm ²				
4	Dielectric Voltage withstand test (耐压测试)	(V/min)	2000		After aging 老化后	Remnant Ultimate Elongation (伸长残率)	≥65%			
5	Spark test (火花测试)	V	3000	Remnant Tensile Strength (抗张残率)		≥70%				
6	Heat shock test (热冲击测试)	(121±1.0℃ /1h)	Not any cracks 不开裂							
7	deformation test (变形测试)	(121±1.0 ℃,250g)	<50%							
8	Cold-bend test (冷弯测试)	(-10±2.0℃ /4h)	Not any cracks 不开裂							
9	Flame test (耐燃测试)	/	VW-1							
MARKING 印字: AWM 1007 E315421 VW-I 80℃ 300V () AWG HONGMENG AWM I A FTI 80℃ 300V () AWG LM						Cross drawing: 截面示意图 				



File E315421 Vol 1 Auth. Page 1 Issued: 2007-10-16
Revised: 2014-12-31

FOLLOW-UP SERVICE PROCEDURE
(TYPE L)

COMPONENT - APPLIANCE WIRING MATERIAL
(AVLV2,AVLV8)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

623824 (Party Site)

Applicant: Kunshan Xinghongmeng Electronic Co Ltd
(100224-942) No. 1118 Jingban Rd
Shipai Industrial Area
Bacheng Town
Kunshan
Jiangsu 215312 CHINA

623824 (Party Site)

Recognized Company: SAME AS APPLICANT
(100224-942)

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: <http://www.ul.com/fus> and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: <http://www.ul.com/responsibilities>. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at <http://www.ul.com/global/eng/pages/corporate/contactus>, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Recognized Company in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Recognized Company will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here: <http://www.ul.com/contracts/Terms-After-12-31-2011>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

It is the responsibility of the Recognized Company to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

This Follow-Up Service Procedure contains information for the use of the above Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Manufacturer with the understanding that it will be returned upon request and is not to be copied in whole or in part.

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the above named Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

UL LLC has signed below solely in its capacity as the accredited entity to indicate that this Follow-Up Service Procedure is in compliance with the accreditation requirements.

Bruce A. Mahrenholz
Director
North American Certification Program

LOCATION

623824 (Party Site)
(100224-942) Kunshan Xinghongmeng Electronic Co Ltd
No. 1118 Jingban Rd
Shipai Industrial Area
Bacheng Town
Kunshan
Jiangsu 215312 CHINA

Factory ID:

UL Contracting Party for above site is: UL AG

HONGMENG ELECTRONIC CO.,LTD

鸿蒙电子有限公司

MATERIAL CERTIFICATE (Cu)

材料成份分析表 (铜)

COMPONENT:	RATIO (%)
<u>成分</u>	<u>含量</u>
COPPER	99.92
<u>铜</u>	
BISMUTH	0.0002
<u>铋</u>	
STIBIUM	0.0005
<u>锑</u>	
ARSENIC	0.0005
<u>砷</u>	
IRON	0.0005
<u>铁</u>	
NICKEL	0.0004
<u>镍</u>	
LEAD	0.0005
<u>铅</u>	
TIN	0.0706
<u>锡</u>	
SULFUR	0.0001
<u>硫</u>	
OXYGEN	0.006
<u>氧</u>	
ZINCUM	0.0002
<u>锌</u>	
PHOSPHOR	0.0005
<u>磷</u>	
ADMIUM	0.0005
<u>镉</u>	

Pb≤50ppm(According to EPA3050B),Cd≤5ppm(According EN1122:2001)
根据 EN1122 和 EPA3050B 规定铅≤90ppm 镉≤5ppm

以上资料由本厂供方震雄铜业集团提供。其中镀锡线中锡的含量来自于铜丝的镀层，主要是防止铜丝氧化而特意加工为之，其它成份为自然界铜矿物质中自然含有的元素，无其它任何作用，也属非有意增加。



鸿蒙电子有限公司
工程部
2009.4.07

HONGMENG ELECTRONIC CO.,LTD

鸿蒙电子有限公司

MATERIAL CERTIFICATE (PVC)

材料成份分析表 (PVC)

COMPONENT: <u>成分</u>	RATIO (%) <u>含量</u>
PVC RESIN 聚氯乙烯树脂	55
PLASTICIZER 增塑剂	20
FILLER(CCR&Caco3) 填充	1
STABILIZER 稳定剂	3.3
RETARDANT(Sb2o3) 阻燃剂	20
LUBRICANT 润滑剂	0.4
PIGMENT 色粉	0.3

Pb $\leq$ 50ppm(According to EPA3050B),Cd $\leq$ 5ppm(According EN1122:2001)
根据 EN1122 和 EPA3050B 规定铅 $\leq$ 90ppm 镉 $\leq$ 5ppm

以上资料由本厂供方金太(台企)提供。

鸿蒙电子有限公司

工程部

2009.4.07





苏州市鸿蒙电子有限公司
SUZHOU HONGMENG ELECTRONIC CO., LTD.
物质安全资料表 (MSDS)
MATERIAL SAFETY DATA SHEET

1. 物质识别号

物品名称: 镀锡单丝、并线及绞线 制

造商或供货商名称/地址

震雄铜业集团有限公司/江苏省昆山市花桥镇花园路 紧

急联络电话/传真电话

TEL:0512-57697318 FAX:0512-57697618

2. 危险识别号

最重要危害与效应

健康危害效应: 铜加工时所产生的铜粉会影响皮肤及呼吸道. 环

境影响: 无

物理性及化学性危害: 无.

特殊危害: 无.

主要症状:无

物品危害分类:无

3. 成分/组成信息

纯物质

中英文名称: 镀锡铜线(Tinned Copper wire) 成份%

物质名称	CAS 号码	EC 号码	含量(%)
Cu	7440-50-8	231-159-6	≥98.5

Se	7782-49-2	231-957-4	≤0.0002
Te	13494-80-9	236-813-4	≤0.0002
Bi	7440-69-9	231-177-4	≤0.0002
Sb	7440-36-0	231-146-5	≤0.0004
As	7440-38-2	231-148-6	≤0.0005
Pb	7439-92-1	231-100-4	≤0.0005
S	7704-34-9	231-722-6	≤0.0015
Fe	7439-89-6	231-096-4	≤0.001
Ag	7440-22-4	231-131-3	≤0.0025
O	7782-44-7	231-956-9	≤0.001
Sn	7440-31-5	231-141-8	≥1.492

危害物质成份(成份百分比): 无

混合物化学性质: 无

危害物质成份之中文 名称	浓度或浓度范围(成 份百分比)	危害物质分类及图式
无	无	无

4. 急救措施

不同暴露途径之急救方法

吸入: 无

皮肤接触: 用水清洁

眼睛接触: 用水清洗 15 分钟,如仍感不适,询问医生. 食入:

呕吐之,如仍感不适,询问医生.

最重要症状及危害效应:无

对急救人员之防护:无

对医生之提示:无

5. 消防措施

适用灭火剂： 二氧化碳,化学干粉

灭火时可能遭遇之特殊危害： 燃烧所产生之大量的有机气体,对人类 会造成伤害

特殊灭或火程序： 请戴供正压或正压全面行自携式呼吸防护具. 消

防人员之特殊防护装备： 穿戴防毒,防火之设备

6. 泄露应急处理

个人应处理事项	环境注意事项	清理方法
无	无	无

7. 处置与储存

处置： 镀锡铜导体应注意与电源隔离，当发生火灾时应及时将导体旁 边的电源切断。

储存： 由于铜导电性优、露置在空气中会变色、在湿空气中表面变成绿色的碱式碳酸盐，故在储存时必须选择远离电源，对铜导体进行严密包装，温湿度相对干燥一些的环境，一般相对湿度在： 60%--75% 为宜。

8. 接触控制与个人防护

工程控制： 铜加工时应避免粉尘污染

控制参数： 十二小时日时量平均容许浓度/短时间时量平均容许浓度/

最高容许浓度: N/A

生物指标: N/A

个人防护设备: 无

呼吸防护	手部防护	眼睛防护	皮肤及身体防护
无	铜加工时戴手套	无	无

9. 物性及化学性质

物质状态	形状	气味	---	---
固态	圆柱形	无	---	---
物质	颜色	沸点/沸点范围	熔解温度	比重
铜	黄色	2595 C	1083 C	8.94
物质	颜色	沸点/沸点范围	熔解温度	比重
锡	银白色	2260 C	231.9 C	7.3

10 稳定性与反应性

安定性:稳定

特殊状况下可能致危害反应：通电后对动物会有触电反应及生命危害。

应避免之状况：裸露直接与电源接触，应避免放置在 180 C 以上的地方
储存。

应避免之物质：与稀硝酸、热浓硫酸、热浓的氢溴酸、乙酸或其它有机酸反应。

11. 毒性资料

急毒性:无

局部效应:无

致敏感性:无

慢毒性或长期毒性:无

特殊效应:无

12. 生态资料

可能之环境影响/环境流布:无

13. 废弃处置方法

废弃处置方法：废弃之铜线由冶炼厂回收利用。

14 运输资料

国际运送规定	联合国编号	国内运输规定	特殊运送方法及注意事项
无	无	无	无

15. 规章

适用法规:无

16 其它资料

参考文献:无

2009 年 12 月 01 日



MATERIAL SAFETY DATA SHEET

物质安全资料表 (MSDS)

一, 物品与厂商资料

物品名称	PVC 电线电缆
产品材料	环保材料
制造厂商	鸿蒙电子有限公司
地址	苏州市相城区太平街道聚金路
紧急联络电话	TEL: 0512-65437018 65437028 65437038 FAX: 0512-65437068

二, 成分辨别资料

主要物质

中英文名称	聚氯乙烯 (POLY (VINY CHLORIDE))	铜 (Copper)
分子式	(C ₂ H ₃ CL) _n	CU
化学文摘社登记号码	(CAS NO) 9002-86-2	7440-50-8
物质含量 (成份%)	40%	60%

添加物质

化学成份	DIDP/TOTM	CaCO ₃	Ca/Ba/Zn	H-ST	Sb ₂ O ₃
物质成份之中英文名称	浓度%	物质分子式	CAS NO.		
Plasticer	28%	C ₃₃ H ₅₄ O ₆	3319-31-1		
Filler (CaCO ₃)	10%	CaCO ₃	471-34-1		
Stabilizer (Ca/Zn)	1.4%	(Ca/Zn)	1592-23-0		
Lubricant (H-ST)	0.3%	PE	9002-88-4		
Fricr-rotardant (Sb ₂ O ₃)	0.3%	Sb ₂ O ₃	1309-64-4		

混合物

化学物质	常温下性质稳定, 不易燃	
危害物质成分之中英文名称	浓度%	危害物质分类
镉 Cd	<5ppm	安定剂
铅 Pb	<50ppm	安定剂

三, 危害辨别资料

最重 要危 害效 应	健康危害效应	没有特殊危险性, 除非高温加热下否则不会引起危害
	环境影响	无法与自然环境中被生物分解
	物理性及化学性危害	固态: 比重 (1.45g/cm ³) 遇火不易燃, 但燃烧时会放出 HCL 气体
	特殊危害	无
主要症状		头晕, 精神混乱
物品危害分类		无

四, 急救措施

不同暴露途径之急救方法	无
吸入	应移至新鲜空气处，必要时使用呼吸器及保持身体及休息，并送医院治疗
最重要症状及危害效应	无
对急救人员之防护	应穿着 C 级防护装备在安全实施急救
对医师之提示	患者吸入 HCL 等有毒气体时，考虑给予氧气

五，灭火措施

选用灭火剂	泡沫、CO ₂ 、干粉
灭火时可能遭遇之特殊危害	HCL、CO ₂ 、CO 会令人中毒而死亡
特殊灭火程序	使用水务冷暴露火焰下之容器设备，救火者穿着防护衣及呼吸器
消防人员之特殊防护设备	消防人员必须配着全身式化学防护及空气呼吸器。 (必要时外加抗闪火铝质被覆外套)

六，泄露处理方法

个人应注意事项	不应乱丢 PVC 胶料
环境注意事项	通知环保相关部门
清理方法	回收再利用

七，安全处置与储存方法

处置	1、使用时亦应保持远离火源 2、避免包装袋受撞击损害
储存	1. 储存于阴凉、干燥、通风良好的区域、避免阳光照射远离不兼容物的（热源及火源） 2、储存在适当，有标签的包装袋内 3、储存区应有灭火器材

八，暴露预防措施

工程控制	尽可能避免受光和热的影响
呼吸防护	带口罩
卫生措施	1、工作后快速脱掉污染之衣物、洗净后才可再穿或丢弃、且需告知洗衣人员污染物之危害 2、工作场所严禁抽烟或饮食 3、处理此物后需彻底洗劫手 4、维护工作场所之环境



九，物理及化学物质

物质状况	固态	形态	粒状	颜色	五颜六色
气味	无味	PH 值	中性	沸点 / 沸点范围	270-280℃ (5hpa)
分解温度	>200℃	闪火点 测试方法	c a. 200℃ DIN EN22 719	爆炸界限	在标准条件下没有爆炸界限
蒸气压	<0. 01hpa(at20℃)	蒸气密度	(空气=1)9.98	溶解度	0.4% (at20℃)

十，安定性及反应性

安定性	正常状况下安定
-----	---------

特殊状况下可能之反应	在热分解时会产生 HCL、CO2、CO 等有毒气体
应避免这状况	避免接触热及火源
应避免之物质	火、酸
危害分解物	CL、CO2、CO、VCM、NO2

十一， 毒性资料

急毒性	加热产生之雾滴和蒸气可能有刺激，造成咳嗽、喉咙痛、恶心 LD50
局部反应	无
致敏性或长期毒性	没有证据显示具有毒性特性
特殊反应	无

十二，生态资料

可能之环境影响/环境流泻	无法在自然环境中被生物分解
--------------	---------------

十三，废弃处置方法

废弃处置方法	可考虑利用特定的卫生掩埋法处理或回收利用
--------	----------------------

十四、运送资料

国际运送规定	并无危害分类
联合国编码	CAS: 64635-11-3
国内运送规定	并无危害分类
特殊运送方法及注意事项	无

十五，法规资料

适用法规	1、劳动安全卫生设施规则 2、危险物及有害通识规则 3、高压气体劳工安全规则 4、劳工作业环境空气中有毒物容许浓度标准 5、道路交通安全规则
------	--

十六，其它资料

参考文献	金太电子和震雄铜业提供物质安全资料表	
制表单位:	鸿蒙电子有限公司	品保部
制表人:	品保部	姓名: 尚营涛
制表日期	2009-3-07	公司章:

Material Safety Data Sheet

NewEast Printing Ink

1. Identification of the substance/preparation and the company

Product Name: Wire & Cable Ink

Company Name: ZheJiang NewEast Printing Ink Group Co.,Ltd.

Address: No.101, Huangjiao Road

Huangyan District

Taizhou, Zhejiang

Fax no: 86-576-84273888

Telephone number for emergency: 86-576-84275656

2. Composition/information on ingredients

Hazardous Components	Cas number	Weight %
Butanone	108-88-3	25%
Ethyl acetate	141-78-6	16%
Iso-Propyl alcohol	67-63-0	6%
Poly urethane	51852-81-4	38%
Titanium dioxide\aroflow	13463-67-7\1333-86-4	15%

3. Hazards identification

Hazards Sort: Flammable Liquid

Contact Health Risks and Symptoms of Exposure:

Can be absorbed by eye, nose or skin and cause irritation & narcosis

Environment Hazards: Causing Pollution

Explode Hazards: Flammable, Vapour combined with air will be mixture of explosibility.

4. First aid measures

Eye contact:

In case of contact with eyes, immediately flush eyes with plenty of water for at least 10 minutes

Consult a doctor/medical service if irritation persists

Skin Contact:

In case of contact with skin, immediately wash skin with plenty of water while removing contaminated clothing

Consult a doctor/medical service if irritation persists

After inhalation:

Remove victim to fresh air, administer artificial respiration as necessary
Consult a doctor/medical service if breathing problems develop

Ingestion:

Do not induce vomiting. Contact a physician and local poison control center immediately

5. Fire-fighting measures

Hazards Characteristic: Vapour combined with air will be mixture of explosibility.

Hazards Gas from burning: Carbon monoxide

Suitable extinguishing media: Foam, carbon dioxide, water spray, dry chemical or sand

6. Accidental release measures

Eliminate all sources of ignition and electrical shock.
Soak up on paper or other absorbent and scoop into closed containers.
Flush area with plenty of water.

7. Handling and Storage

Danger! Extremely flammable. Keep away from heat, sparks and flame. Wear safety work clothes with good electric. Keep the air circulation in working area. Keep containers closed when not in use.

8. Exposure Controls/Personal Protection

Limit of Concentration

Hazardous Components	Manage Concentration	ACGEH 2002
Butanone	50	100
Ethyl acetate	200	400
Iso-Propyl alcohol	200	200

Respiratory Protection: Approved respirator for organic vapors and fumes. Keep the air circulation in working area.

Ventilation: Good ventilation is essential in areas where this product is handled to prevent the accumulation of explosive mixtures. Explosion-proof fans should be used in mechanical type ventilation systems.

Protective Gloves: Ink-resistance gloves

Eye Protection: Goggles or safety glasses with side shields.

Other Protection: Avoid contamination of food, drink, hands, etc. No smoking when handling. Regular physical examination is essential.

9. Physical and chemical properties

Physical State: Liquid with aromaticity.

Relative Density: 0.8~1.3(water=1)

Boiling Point: > 60°C

Solubility: Insoluble in water & Soluble in organic solvent

10. Stability and reactivity

Stability: Stable in room temperature

Incompatibility (Materials to avoid): Strong oxidizing materials

Hazardous Decomposition or Byproducts: Oxides of Carbon and nitrogen

Environment to avoid: Keep away from heat, sparks and flame.

11. Toxicological information

Acute toxicity:

Toxicity Components	LC50 oral rat	LC50 inhalation rat
Butanone	No data available	No data available
Ethyl acetate	5620PPM/KG	1600PPM/8H
Iso-Propyl alcohol	5840PPM/KG	2500PPM/8H

Chronic toxicity:

Loss of orexis and skin irritation

Acute effects/symptoms:

After inhalation, the symptoms may include headache, dizziness and nausea.

After skin, eye and nose contact, the symptoms may include irritation,

12. Ecological information

Ecological Toxicity

Toxicity Components	TLM48 Cyprinoid
Butanone	>40 PPM
Ethyl acetate	>40 PPM
Iso-Propyl alcohol	>1300 PPM

Degradability: Butanone has a good degradability and Ethyl acetate will decompose slowly with water.

13. Disposal considerations

Waste character: hazardous waste

Disposal method:

Use a high temperature incinerator equipped with secondary combustion chamber and acid gas scrubber.

Note: Waste shall be disposed of in accordance with federal, state, and local environmental control regulations

14. Transport information

Hazardous shipping number: 32199

UN number: 1210

Packing symbol: Flammable Liquid

Packing sort: II

Packing method: metal pail with inside coat and small & big meatus

Transport Note:

In transport, be careful for dropping, rolling and leakage. Transport height should be lower than 3m.

15. Regulatory information

Statute: GB13690-1992

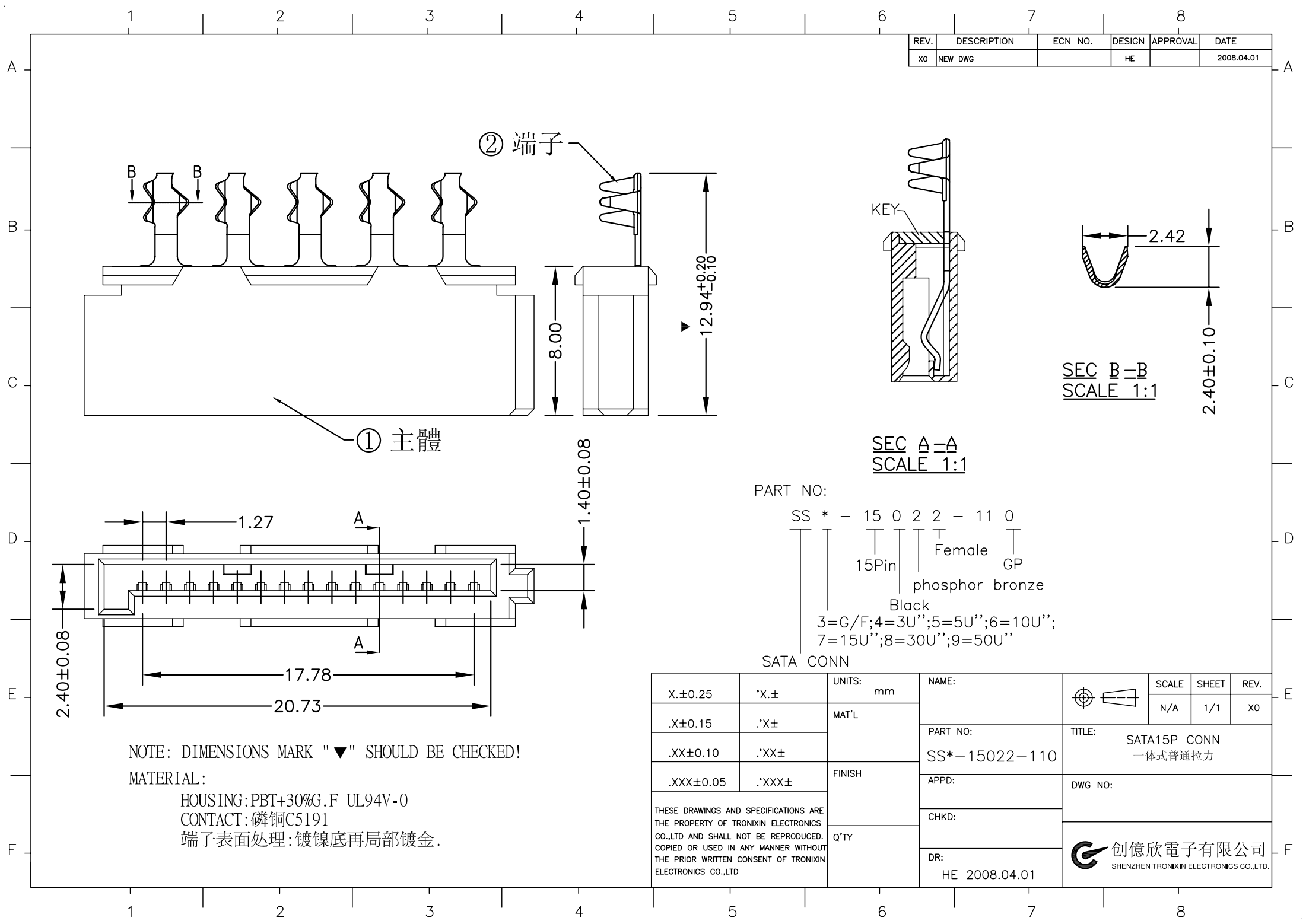
GB15603-1995

GB12268-2002

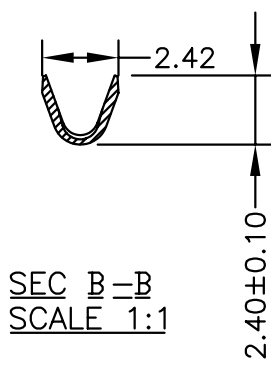
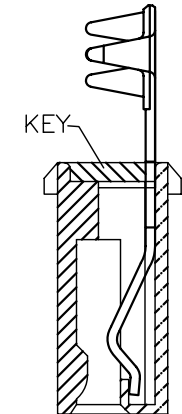
State Department' s 344th regulations

16. Other information:

《hazardous chemicals safety handbook》



REV.	DESCRIPTION	ECN NO.	DESIGN	APPROVAL	DATE
X0	NEW DWG		HE		2008.04.01



SEC A-A
SCALE 1:1

SEC B-B
SCALE 1:1

PART NO:

SS * - 15 0 2 2 - 11 0
15Pin Female GP
phosphor bronze
Black
3=G/F;4=3U'';5=5U'';6=10U'';
7=15U'';8=30U'';9=50U''

SATA CONN

X.±0.25	*X.±	UNITS: mm	NAME:		SCALE	SHEET	REV.
					N/A	1/1	X0
.X±0.15	.*X±	MAT'L	PART NO:	TITLE: SATA15P CONN 一体式普通拉力			
.XX±0.10	.*XX±		SS*-15022-110				
.XXX±0.05	.*XXX±	FINISH	APPD:	DWG NO:			
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF TRONIXIN ELECTRONICS CO.,LTD AND SHALL NOT BE REPRODUCED. COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF TRONIXIN ELECTRONICS CO.,LTD		Q'TY	CHKD:				
			DR:	创億欣电子有限公司 SHENZHEN TRONIXIN ELECTRONICS CO.,LTD.			
			HE 2008.04.01				

NOTE: DIMENSIONS MARK "▼" SHOULD BE CHECKED!

MATERIAL:

HOUSING:PBT+30%G.F UL94V-0

CONTACT:磷铜C5191

端子表面处理:镀镍底再局部镀金.

东莞正昱塑胶五金有限公司

材 质 证 明 书

PBT加纤30%94V₀材质书

兹确认本公司供给贵公司原料，乃采用台湾新光公司底料加工而成。

- 1、底料：（新光）PBT树脂
- 2、含玻璃纤维：30%
- 3、防火度：符合94V₀
- 4、外观：黑色颗粒

使用条件：

- 1、烘干温度：120℃~140℃
- 2、烘干时间：2~4小时
- 3、注塑温度：245℃~265℃
- 4、模具温度：60℃~80℃

本数据仅供参考使用。



上海五兴铜材制造有限公司
SHANGHAI WUXING COPPER PRODUCTION CO., LTD

产品质量保证书
MATERIAL CERTIFICATION REPORT

Nº 0000459

客户名称:
CUSTOMER

型号 DESIGN	规格 SPECIFICATION	状态 TEMPER	重量 WEIGHT	件数 PIECE	生产批号 Lot NO.	
AK	0.3x440	TY	1.97吨	21件	0506191	
试验项目 TEST ITEM	抗拉强度 σb(Mpa)	延伸率 δ 5%	维氏硬度 HAIKONF50	杯突深度 mm. DEFTUSII		
	183.2	25	166.3			
化学成分 CHEMICAL COMPOSITION	铜 Cu	锌 Zn	铁 Fe	铝 Al	锡 Sn	磷 P
	64.6	3.8	0.012	0.0082	0.0043	0.002
						0.0019
						LO3
执行标准 STANDARD	GB/T 2059-2000		检验员 INSPECTOR			
			05年8月			

客户联

QMFZ2 Component - Plastics

Friday, October 24, 2003

E42337

TICONA GMBH
POSTFACH 15 61 65444 KELSTERBACH GERMANY

Material Designation: **3316**

Product Description: Polybutylene Terephthalate (PBT), designated "Celanex" furnished as pellets.

Color	Min. Thick. (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str	IEC GWIT	IEC GWFI
NC	0.38	V-0	-	-	-	-	-	-	-
ALL	0.75	V-0	3	0	140	130	140	-	-
	1.5	V-0, SVA	2	0	140	130	140	-	-
	3.0	V-0, SVA	1	0	140	130	140	-	-

CTI: 2

HVTR: 0

D495: 6

IEC Ball Pressure (°C): -

Dielectric Strength (kV/mm): 23

ISO Tensile Strength (MPa): -

ISO Tensile Impact (kJ/m²): -

Volume Resistivity (10⁹ohm-cm): 16

ISO Flexural Strength (MPa): -

ISO Izod Impact (kJ/m²): -

Dimensional Stability(%): 0.0

ISO Heat Deflection (°C): -

ISO Charpy Impact (kJ/m²): -

(b) Virgin and regrind from 1 to 50 % by weight incl. have the same basic material characteristics.

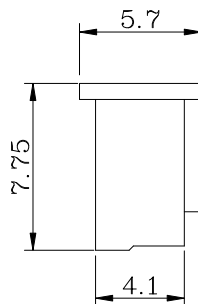
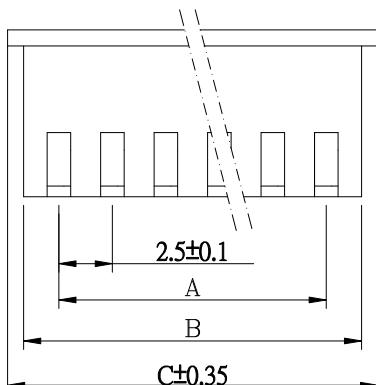
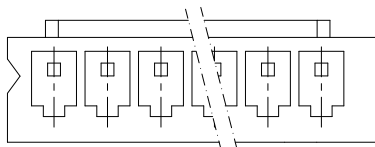
Report Date: 1/19/1998

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.



C25010101/02



NOTE:

1. Housing Material: Nylon 66 UL94V-0
2. Insulation resistance: 1000M ohm/min.
3. Withstand voltage: 1000V AC/minute.
4. Current retang: 3A AC/DC.
5. Voltage rating: 250V AC/DC
6. Bill of Part No:

NO	PART NO	COLOR	LOGO
1	25010101	本色	CKM
2	25010102	紅色	CKM

7. Dimensional and Ordering Information:

Part No.	PINS	A	B	C
250101XX-02	2	2.50±0.2	5.8	7.3
250101XX-03	3	5.00±0.2	8.3	9.8
250101XX-04	4	7.50±0.2	10.8	12.3
250101XX-05	5	10.00±0.2	13.3	14.8
250101XX-06	6	12.50±0.2	15.8	17.3
250101XX-07	7	15.00±0.2	18.3	19.8
250101XX-08	8	17.50±0.2	20.8	22.3
250101XX-09	9	20.00±0.2	23.3	24.8
250101XX-10	10	22.50±0.25	25.8	27.3
250101XX-11	11	25.00±0.25	28.3	29.8
250101XX-12	12	27.50±0.25	30.8	32.3
250101XX-13	13	30.00±0.25	33.3	34.8
250101XX-14	14	32.50±0.25	35.8	37.3
250101XX-15	15	35.00±0.25	38.3	39.8
250101XX-16	16	37.50±0.25	40.8	42.3
250101XX-17	17	40.00±0.25	43.3	44.8
250101XX-18	18	42.50±0.25	45.8	47.3
250101XX-19	19	45.00±0.25	48.3	49.8
250101XX-20	20	47.50±0.25	50.8	52.3

①
③
③
③
③
②

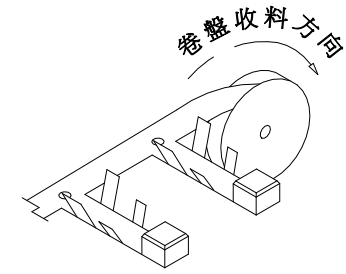
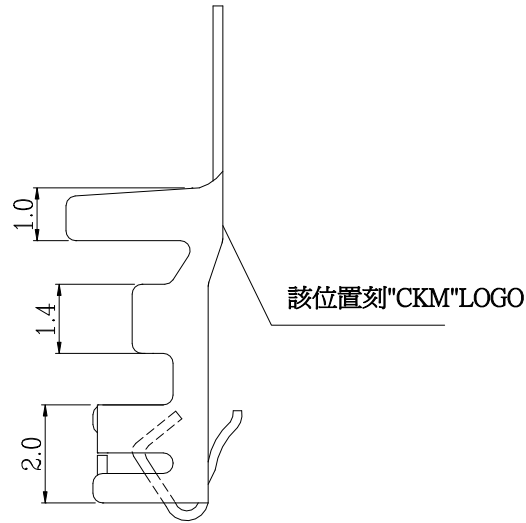
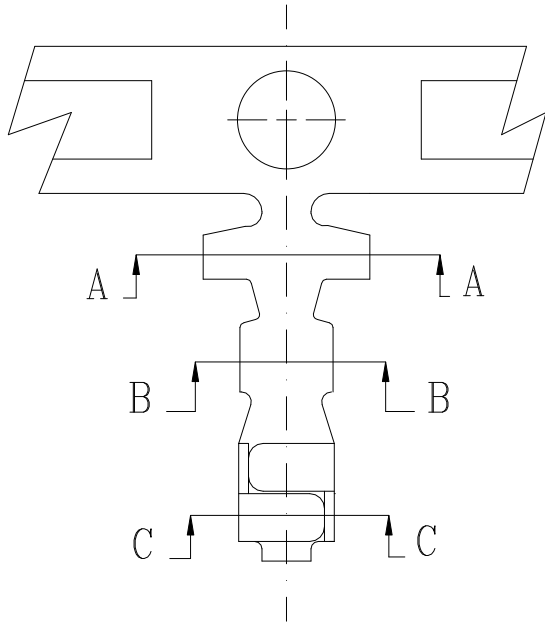


朝貴電子發展有限公司
CHAO GUI ELECTRONIC DEVELOPMENT CO., LTD

TOLERANCE:	X ±0.25	XX ±0.15	XXX ±0.10	X' ±3'	X' ±1'	UNITS:MM	PAGE: 1/1	
CKM P/N:	250101XX-XX							
CUST P/N:								
DWG NAME:	XH2.5-H							
REV: A3	SCALE:NONE		APPR.	CHECK	DRAW.			

③	200906001	增加17-19PIN尺寸	20090615
②	200411002	增加20PIN尺寸	20041102
①	200409002	增加16PIN尺寸	20040909
LTR	ECN	REVISION RECORD	DATE

C25010301~04

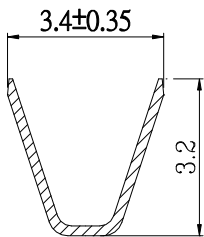


- 一.料帶:朝內
二.作用面:向上
三.卷盤繞向:順時針
(端子收料示意圖)

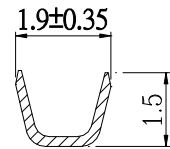
NOTE:

- Terminal Material: Phosphor bronze $\triangle 1$
Brass bronze $\triangle 2$
- Applicable wires: AWG#28 - #22
- Insulation O.D.: 1.2-1.76 mm
- Q'ty / reel: 7,000 pcs
- Bill of Part No:

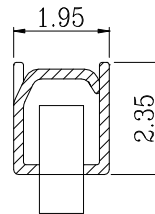
NO	PART NO	PLATED	PLATED	LOGO	Material	備注
1	25010301	Plating-Tin	14-111	CKM	$\triangle 2$	重拉力
2	25010302	Plating-Tin	13-107	CKM	$\triangle 1$	重拉力
3	25010303	Plating-霧Tin	25012303	CKM	$\triangle 2$	重拉力
4	25010304	Plating-Gold	25012304	CKM	$\triangle 2$	重拉力



SEC A-A



SEC B-B



SEC C-C



朝貴電子發展有限公司
CHAO GUI ELECTRONIC DEVELOPMENT CO., LTD

TOLERANCE: $\begin{matrix} X & XX & XXX & X' & X' \\ \pm 0.25 & \pm 0.15 & \pm 0.10 & \pm 3' & \pm 1' \end{matrix}$		UNITS:MM	PAGE: 1/1	
CKM P/N:	250103XX			
CUST P/N:				
DWG NAME:	XH2.5-T			
REV:A	SCALE:NONE	APPR.	CHECK	DRAW.

LTR	ECN	REVISION	RECORD	DATE

中科技股份有限公司
TUNGLOOY CO., LTD.

INSPECTION CERTIFICATE

台灣省桃園縣楊梅鎮隆興路 8 號
No. 8, Ming Long Road, Yang Mei Chen,
Tao Yuan Hsien, Taiwan
TEL: 886-3-472-5833 FAX: 886-3-472-7711

召翎有限公司

C2680R-EH JIS H3100(2003)

Our Order No:

Your P/O No:

Your Part No:

Date: 25 November

Weight: 0.0 Kg

Standard Dimension	Property Test								Weight (Kg)
	Yield strength (kgf/mm ²)	Tensile strength (kgf/mm ²)	Young's modulus (kgf/mm ²)	Elongation (%)	Hardness (Hr)	Conductivity (%IACS)	Bend Test (180°)	Grain Size (mm)	
0.2*400	47.00	53.0 ~ 60.0	10500 REF	≥ 7	160 ~ 180	≥ 25.00	-	≤ 0.010	
	51.7	57.7	10510	8	178 ~ 180	26.00	Good	0.010	

Composition (wt%)							Dimension	
Cu	Sn	S	Zn	Fe	Pb	Surface Roughness Ra(μm)	Thickness (mm)	Width (mm)
64.000 ~ 68.000	-	-	REM	≤ 0.0400	≤ 0.0090	≤ 0.1500	0.190 ~ 0.210	399.80 ~ 400.20
67.000	0.0060	0.0006	Remainder	0.0253	0.0075	0.082	0.1970	400.000

Mechanical properties shall be determined in accordance with ASTM E8 : ISO 6892

2004-19-97

OMFZ2

Component-Piaetics

June 28 1993

TORAY INDUSTRIES INC



E41797 (M)

(B010-Cont, from B005 Card)

UTN121	AII	1.57	94HB	65	85	85	--	--	--	--	--
U121		3.12	94HB	65	65	65	--	--	--	--	--
POLYamide, Type 66 nylon (PA66), furnished in the form of pellets.											
3001-N,	AII	0.71	94V-2	105	65	80	4	0	1	--	--
3007		1.47	94V-2	105	75	85	4	0	0	--	--
		3.05	94V-2	105	75	85	3	0	0	6	0
UTN320	AII	1.57	94HB	35	65	65	--	--	--	--	--
U320		3.12	94HB	65	65	65	--	--	--	--	--
3004-V0	AII	0.33	94V-0	--	--	--	--	--	--	--	--
		0.66	94V-0	130	--	--	4	0	0	--	--
		1.55	94V-0	130	--	--	3	0	0	--	--
		3.05	94V-0	130	--	--	2	0	0	5	0

Reports: August 14, 1981; September 12, 1989; September 18, 1989; September 13, 1989.

Replaces E41797B1A dated November 1, 1990.

(cont. on B015 card)

714089011 N7047 Underwriters Laboratories Inc.

DIL/0235149



天 申 铜 业

昆山市天申铜业五金机电有限公司

产 品 质 量 证 明 书

客户名称			产品名称	规格	状态	重量（kg）	执行标准	
昆山朝贵电子发展有限公司			C2680	0.2*31	EH	323.6	JISH3100	
化 学 成 分								
元 素	Cu	Fe	Pb	Sb	Bi	P	Zn	杂质总和
规 范	64.0-68.0	<0.05	<0.03	<0.005	<0.002	<0.01	余量	<0.3
实 测	65.18	0.0098	0.0054	0.0015	0.0012	0.0019	余量	
机 械 性 能								
项 目	硬度 Hv		抗拉强度 MPa			伸长率%		
规 范	170-195		570-670			/		
实 测	175		600			3.5		
尺 寸 公 差								
项 目	厚 度	宽 度	长 度	侧 弯		无公章无效		
规 范	±0.01	+0/-0.08	/	/				
实 测	0.197	30.94	/	/				
签证部门	质检部		日 期 2008-5-29					

产 品 质 量 证 明 书

客户名称			产品名称	规格	状态	重量（kg）	执行标准	
昆山朝贵电子发展有限公司			C2680	0.2*17	EH	355.2	JISH3100	
化 学 成 分								
元 素	Cu	Fe	Pb	Sb	Bi	P	Zn	杂质总和
规 范	64.0-68.0	<0.05	<0.03	<0.005	<0.002	<0.01	余量	<0.3
实 测	65.18	0.0098	0.0054	0.0015	0.0012	0.0019	余量	
机 械 性 能								
项 目	硬度 Hv			抗拉强度 MPa		伸长率%		
规 范	170-195			570-670		/		
实 测	175			600		3.5		
尺 寸 公 差								
项 目	厚 度	宽 度	长 度	侧 弯		无公章无效		
规 范	±0.01	+0/-0.08	/	/				
实 测	0.197	16.94	/	/				
签证部门	质检部			日 期 2008-5-29				

ECBT2.E186634 Connectors for Use in Data, Signal, Control and Power Applications - Component

[Previous Page](#)

Connectors for Use in Data, Signal, Control and Power Applications - Component

CHAO KUEI MOLD INDUSTRIAL CO LTD
74 KAI LUNG ST
CHIEH DUNG LI
PA-TEH CITY
TAOYUAN HSIEN, TAIWAN

E186634

Cat. Nos. CKM25 followed by 01, 02, 03, 04, 05, 06, 07, 08, 09, 41, 42, 43 and 44, CKM5081 and CKM5082, all may be followed by WV, WR, H or T, followed by a number, followed by P.

Cat. No. CKM4201, may be followed by WV, WVP, WR, WRP, H or T, followed by a number, followed by P.

Cat. Nos. CKM1561, CKM2001, CKM2002, CKM2003, CKM2004, CKM2361, CKM3961, CKM3962, CKM3953 all may be followed by WV, WR, H, HV, HR or T, followed by a number, followed by P.

Connectors, Cat. No. CKM4201F may be followed by E, followed by 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 or 24; Cat. No. CKM4201M followed by 2, 4, 6, 8, 10, 12; 14, 16, 18, 20, 22 or 24.

Low voltage connectors, Cat. Nos. CKM1251H, CKM1251WR, CKM1251WV, CKM1251WE, CKM1251WD followed by 2 through 15, may be followed by P.

Marking: Company name and catalog designation on device or carton.

This page and all contents are Copyright© 2003 by Underwriters Laboratories Inc®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained on UL's Website subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright© 2003 Underwriters Laboratories Inc®"



Your ePlatform Partner

Advantech Co., Ltd.
No.1, Alley 20, Lane 26, Rueiguang Road,
Neihu District, Taipei, Taiwan 114, R.O.C.
Tel: 886-2-2792-7818 Fax: 886-2-2794-7305

RoHS Restricted Substances Declaration Sheet

Our company, including business partners, hereby guarantees that any product or material provided to ADVANTECH will not contain below restricted hazardous substances upon this declaration has been released. If we violate this declaration, we will take responsibility to compensate ADVANTECH for any loss.

【Six restricted substances defined in RoHS 2002/95/EC directive】

【PFOS restricted substances defined in EU 2006/122/EC directive】

【restricted substances defined in below choice specification】

☐ IBM 46C46.14, Rev001 Person in Charge : _____ (stamp)

☐ NOKIA G-1 5584, Version10.0 Person in Charge : _____ (stamp)

☐ Nokia Siemens Networks Substance List, Version1.0
Person in Charge : _____ (stamp)

☐ SONY SS-79 for General Use, Seventh Edition
Person in Charge : _____ (stamp)

Company Name : _____ (stamp)

Person in Charge : _____ (stamp)

Release Date : 2008.6.2





Your ePlatform Partner

Advantech Co., Ltd.
No.1, Alley 20, Lane 26, Rueiguang Road,
Neihu District, Taipei, Taiwan 114, R.O.C.
Tel: 886-2-2792-7818 Fax: 886-2-2794-7305

限用物質不使用聲明書

本公司（包括協力廠商）特此保證：

提供給貴公司，貴公司之子公司或協力廠商的所有產品或零組件中，絕不包含以下所列物質。如果有違背此聲明，本公司將會負責賠償貴公司的損失。

【符合RoHS 2002/95/EC 指令所規定的六項禁用物質】

【符合EU 2006/122/EC 指令所規定的PFOS禁用物質】

【符合以下勾選之研華客戶規範所規定的禁用物質】

☐ IBM 46C34.00 Rev002

負責人：_____ (印)

☐ NOKIA 6-145-54, Version10.0

負責人：_____ (印)

☐ Nokia Siemens Networks Substance List, Version1.0

負責人：_____ (印)

☐ SONY SS00000 for General Use, Seventh Edition

負責人：_____ (印)

公司名稱：_____



(印)

負責人：_____

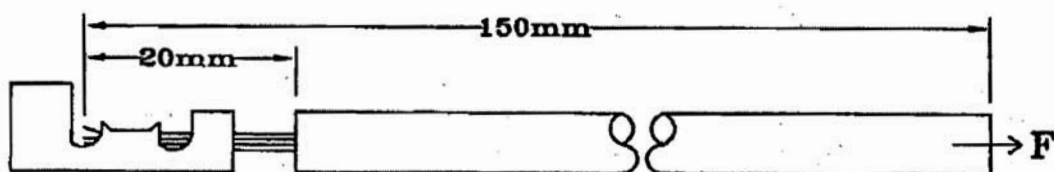
(印)

聲明日期：2008年6月2日

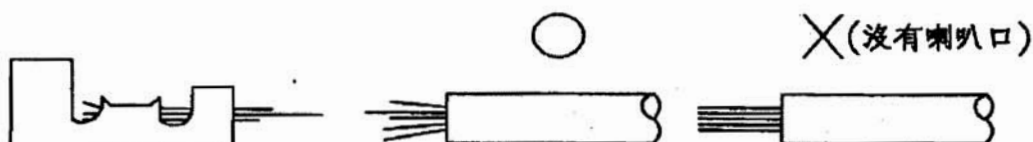
鴻呈電子（蘇州）有限公司	拉力規格表與拉力測試	編號	
		版次	
		頁次	1 OF 1
		日期	

拉力測試值			
線材規格		IPC 620A	IPC 620A
AWG	mm ²	N(牛頓)	kg(公斤)
30	0.05	6.70	0.6837
28	0.08	8.90	0.9082
26	0.13	13.40	1.3673
24	0.2	22.30	2.2755
22	0.324	35.60	3.6327
20	0.519	57.90	5.9082
18	0.823	89.00	9.0816
16	1.31	133.50	13.622
14	2.08	222.50	22.704
12	3.31	311.50	31.786
10	5.261	356.00	36.327
8	8.367	400.50	40.867
6	13.3	445.00	45.408
4	21.15	623.00	63.571
3	26.67	712.00	72.653
2	33.62	801.00	81.735
1	42.41	890.00	90.816
1/0	53.49	1112.50	113.52
2/0	67.43	1235.00	126.02
3/0	85.01	1557.50	158.93
4/0	107.2	2202.50	224.74
250	127	2225.00	227.04
300	156	2447.50	249.74
350	177	2670.00	272.45
400	203	2892.50	295.15
500	253	3560.00	363.27
600	304	4005.00	408.67
700-2000	355-1016	4450.00	454.08

壓著強度測試方法：



150mm之電線剝皮20mm
端子壓著後電線25mm/分的速度下,每種線徑之拉力
須依壓著強度規格表之規格。
又破壞測試後芯線殘餘芯數約3~4條為正常壓著。



破壞測試後之芯線形狀

核准



審核：

日期：8/15

制表：

日期：8/15

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Advantech:](#)

[1700018785](#)