# RAPPROVAL SHEET

承 認 書

Customer

客戶名稱: KUK JAE TELE PARTS CO., LTD.

Description:

產品描述: D-SUB Socket High Density Right Angle Type

Part No.:

客戶編號:

Part No.:

繼德編號: 5510-XXS-XX-XX-F1

Date 日期: MAY-02-2008

Rev. 版 次: A

經辦(Evaluted)	審核(Checked)	核準 <b>(</b> Approval)	客戶承認(Approval)
Yang xia	Jeremy Liu	Mike Wu	





UL:Recognized NO. E 144392



## **Head Office**

臺北市士林區承德路四段 184 號 2 樓

2F, 184, Chang –Teh Road, Sec. 4, Shih-Lin, Taipei, Taiwan, R.O.C. TEL:886-2-28802631(10 Lines) FAX:886-2-28802710 -28802888 http://www.neltron.com.tw E-mail: neltron@neltron.com.tw

# China Factory

中國廣東省東莞市塘廈鎮科苑城橫田二路一號

Science Service Plaza ,1,Hengtian Second Road ,

Tangxia Town Dongguan City .Guangdong Province ,China

www.DataSheet4U.com

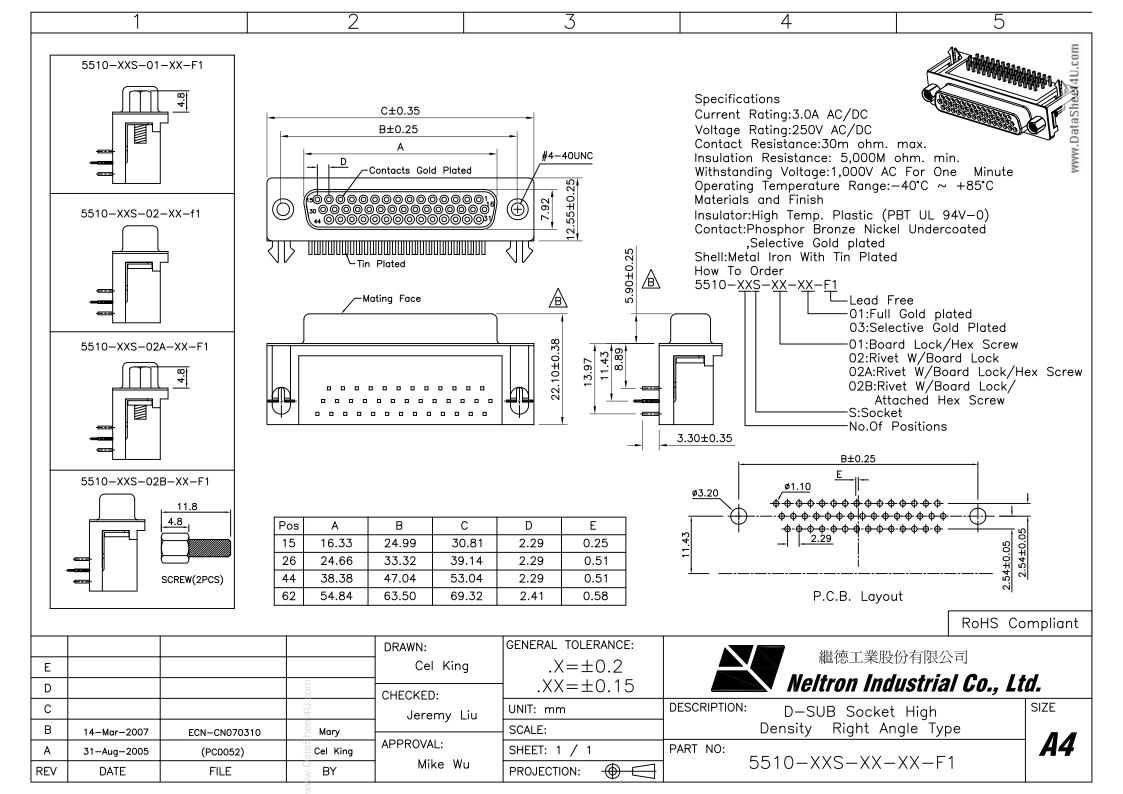


# **Bill of Approval Sheet**

www.DataShProduct Description: D-SUB Socket High Density Right Angle Type

Product Part NO.: 5510-XXS-XX-XX-F1 ate: MAY-02-2008

	1
Index	Item
1	Cover
2	Bill of Approval Sheet
3	Customer drawing
4~6	Product specification
7	Plastic
8~12	Plastic SGS
13	Terminal
14~16	Terminal SGS
17	Shell Material
18~20	Shell SGS
21~22	Plating
23~31	Plating SGS
32~35	UL Card





# **PRODUCT SPECIFICATION**

## 1.Scope

This specification covers D-SUB Socket High Density Right Angle Type

## 2.Product name and part number

Product Name	Part Number
D-SUB Socket High Density Right Angle Type	5510-XXS-XX-XX-F1

### 3.Material/Finish

Name	Material	Finish	Color
Plastic	PBT (UL94V-0)		
Terminal	Phosphor Bronze	Selective Gold Plated	
Shell	Metal Iron	Tin Plated	

<sup>\*</sup>Refer to the drawing.

### 4.Rating

Item	Standard		
Rated Voltage (MAX.)	250 V	40/00	
Rated Current (MAX.)	3.0 A	AC/DC	
Ambient Temperature	-40℃~+85℃		
Range			

<sup>\*1:</sup> Including terminal temperature rise.

### 5. Performance

### **5-1.** Electrical Performance

Item		Test Condition	Requirement
5-1-1	Contact Resistance	Mate connectors D-SUB Socket High Density Right Angle Type and measure by dry circuit, 20mVMAX.10mA. (JIS C5402 5.4)	30mΩ MAX
5-1-2	Insulation Resistance	Mate connectors D-SUB Socket High Density Right Angle Type and apply 1000V DC between adjacent terminal or ground. (JIS C5402 5.2/MIL-STD-202 Method 302)	5000ΜΩ ΜΙΝ
5-1-3	Dielectric Strength	Mate connectors D-SUB Socket High Density Right Angle Type and apply 1000V AC (rms) for 1 minute between adjacent terminal or ground. (JIS C5402 5.1/MIL-STD-202 Method 301)	No Breakdown

## 5-2 Mechanical Performance

	Item	Test Condition	Requirement	
5-2-1	Insertion and	Insert and withdraw connectors at the	Insertion	V out/Disc/Mass)
5-2-1	Withdrawal	speed rate of 25±3mm/minute. Force		Kgf/Pin(Max)



	Force		Withdrawal	Kgf/Pin(Min)
			Force	Kgi/Fili(Willi)
<b>5</b> 2 2	Terminal	Apply axial pull out force at the speed rate	of	leaf MINI
5-2-2	Retention Force	25±3mm per minute.		kgf MIN

## 5-3. Environmental Performance and Others

Item		Test Condition	Requi	rement
5-3-1	Repeated Insertion and Withdrawal	When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute.	Contact Resistance	30 mΩ MAX
5-3-2	Temperature Rise	Carrying rated current load. (UL 498)	Temperature rise	20 ℃ MAX
		Amplitude:1.5mm P-P	Appearance	No Damage
5-3-3	Vibration	Sweep time:10-55-10 Hz In 1 minute Duration: 2 hours in each of	Contact Resistance	30 mΩ MAX
		X.Y .Z .axes (MIL-STD-202 Method 201)	Discontinuity	1µsec. MAX
		490m/S <sup>2</sup> (50G),3 strokes in each X, Y,	Appearance	No Damage
5-3-4	Shock	Z axes. (JIS C0041/MIL-STD-202 Method 213)	Contact Resistance	30 mΩ MAX
		,	Discontinuity	1µsec. MAX.
		85±2℃ 48hours	Appearance	No Damage
5-3-5	Heat Resistance	(JIS C0021/MIL-STD-202 Method 108)	Contact Resistance	30mΩ MAX
	Cold	-40±3℃ 48 hours	Appearance	No Damage
5-3-6	Resistance	(JIS C0020)	Contact Resistance	20 mΩ MAX
		(JIS C0022/MIL-STD-202 Method	Appearance	No Damage
	Humidity		Contact Resistance	30 mΩ MAX
5-3-7			Dielectric Strength	Must meet 4-1-3
		103)	Insulation Resistance	5000ΜΩ ΜΙΝ
	_	5 cycles of:	Appearance	No Damage
5-3-8	Temperature Cycling	a)-55℃ 30 minutes b)+105℃ 30 minutes (JIS C0025)	Contact Resistance	30 mΩ MAX
		12±4 hours exposure to a salt	Appearance	No Damage
5-3-9	Salt Spray	spray from the 5±1% solution at 35±2℃ (JIS C0023/MIL-STD-202 Method 101)	Contact Resistance	20mΩ MAX
		24 hours avacture to 50±5000	Appearance	No Damage
5-3-10	SO <sub>2</sub> Gas	24 hours exposure to 50±5ppm. $SO_2$ gas at $40\pm2^{\circ}$	Contact Resistance	30 mΩ MAX
		40 minutes exposure to NH <sub>3</sub> gas	Appearance	No Damage
5-3-11	NH₃ Gas	evaporating from 28% Ammonia solution	Contact Resistance	30mΩ MAX

5-3-1	Solder- ability	Solder Time:5±0.5 sec. Solder Temperature:220±5℃ Solder Wetting		95% of immersed area must show no voids, pin holes
5-3-1	Resistance To Soldering Heat	Soldering Time:5±0.5 sec. Solder Temperature:220±5℃	No Damage	
5-3-1	4 Soldering Profile			Supplier to
	5-3-14-1 Manual	Solder temp: 400±5°C		provide measured data
	soldering	Time: 5± 0.5 sec		into the Table 1.
	5-3-14-2Wave	Soldering temp : 220 ± 5°C		
	Soldering	Soldering time : $5 \pm 0.5$ s		
heet4U.com	1	Preheating : 150 ± 10°C for 1 to 2 mir	۱.	
		220 + 220°C(5se	ec±0.5sec)	
		150 150 160°C 160°C 100°C 100°	80 240 ute	

# SHINITE™ PBT

性質	METHOD	UNIT	D201	D201G15	D201G30	D202	1
比重	D792		1.31	1.39	1.52	1.40	1
含水率	D570	%	0.09	0.07-	0.07	0.08	]
模收縮 流動方向 班直方向	D955	%	0,8 - 2,0 0,8 - 2,0	0,3 - 0,5 0,5 - 0,9	0,2 - 0,4 0,5 - 0,9	0,6 - 1,9 0,6 - 1,9	
抗張強度	D638	kg/cm²	550	1000	1250	600	1
仲長率	D638	%	40	4	4	6	
灣曲強度	D790	kg/cm²	850	1600	2100	900	1
彎曲模數	D790	kg/cm²	25000	52000	90000	26000	1
衝撃強度缺口 1/8" (23°C)	D256	kg x cm/cm	4	8	10	4	
洛式硬度	D785	R	118	120	120	118	l
熱變形溫度	D648	*C	65	205	210	70	
耐燃性	UL-94	***	НВ	HB	НВ	V0	
介電強度	D149	KV/MM	. 15	15	20	15	
介電常數	D150		3	3	4	: 3	
體積電阻	D257	Ω-CM	1.00E+16	1.00E+16	1.00E+16	1.00E+16	1
IN DIENT			11.000.				,
性質	METHOD	UNIT	D202G15	D202G20	D202G30	E202G15	E202330
性質	METHOD	UNIT	D202G15	D202G20	D202G30	E202G15	E202330
性質 比重 含水率 模收縮 流動方向 垂直方向	METHOD D792 D570 D955	UNIT  % %	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9	1.50 0.07 0,3 - 0,5 0,5 - 0,9	1.61 0.07 0,2 - 0,4 0,5 - 0,9
性質 比重 含水率 模收縮 流動方向 垂直方向 抗張強度	METHOD D792 D570 D955	UNIT %  % kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950	D202G20 1.53 0.07 0,3 - 0,5	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300	E202G15 1.50 0.07 0,3 - 0,5	1.61 0.07 0,2 - 0,4
性質 比重 含水率 模收縮 流動方向 垂直方向 抗張強度	METHOD D792 D570 D955 D638 D638	UNIT %  % kg/cm² %	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4	0.07 0.3 - 0.5 0,5 - 0,9 920	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300
性質 比重 含水率 模收縮 流動方向 垂直方向 抗張強度 仲畏率	METHOD D792 D570 D955 D638 D638 D790	UNIT %  kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950	1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000
性質 比重 含水率 模收縮 流動方向 延直方向 抗張強度 伸長率 彎曲強敗	METHOD D792 D570 D955 D638 D638	UNIT %  % kg/cm² %	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4	0.07 0.3 - 0.5 0,5 - 0,9 920	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300
性質 比重 含水率 模收縮 流動方向 垂直方向 抗張強度 仲畏率	METHOD D792 D570 D955 D638 D638 D790	UNIT %  kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950	1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000
性質 比重 含水率 模收縮 流動方向 垂直方向 抗聚強度 學曲模數 衝擊強數 衝擊強數 衝擊。(23°C) 洛式硬度	METHOD D792 D570 D955 D638 D638 D790 D790 D790 D256 D785	UNIT %  kg/cm² % kg/cm² kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600 60000	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750 70000	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950 95000	1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470 56000	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000 93000
性質 比重 含水率 模收縮 流動方向 垂直方向 抗聚強度 學曲換度 對曲模數 衝擊強度缺口 1/8" (23°C)	METHOD D792 D570 D955 D638 D638 D638 D790 D790 D790	UNIT %  kg/cm² % kg/cm² kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600 60000	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750 70000 7.5	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950 95000	1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470 56000 5.5	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000 93000 8.5
性質 比重 含水率 模收縮 流動方向 垂直方向 抗聚強度 學曲模數 衝擊強數 衝擊強數 衝擊。(23°C) 洛式硬度	METHOD D792 D570 D955 D638 D638 D790 D790 D790 D256 D785	UNIT %  kg/cm² % kg/cm² kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600 60000 6	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750 70000 7.5	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950 95,000 9	1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470 56000 5.5	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000 93000 8.5
性質 比重 含水率 模收縮 流動方向 延順 強力 強力 動態 動態 動態 動態 動態 動態 動態 動態 動態 動態 動態 動態 動態	METHOD D792 D570 D955  D638 D638 D790 D790 D790 D256 D785 D648	UNIT %  kg/cm² % kg/cm² kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600 60000 6 120 200	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750 70000 7.5 120 205	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950 95,000 9	1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470 56000 5.5 120 205	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000 93000 8.5 120 210 V0
性質 比重 含水率 模收縮 流動方向 垂直 一个 一个 一个 一个 一个 一个 一个 一个 一个 一个 一个 一个 一个	METHOD D792 D570 D955 D638 D638 D638 D790 D790 D790 D256 D785 D648 UL-94	UNIT %  kg/cm² % kg/cm² kg/cm² kg/cm²	D202G15 1.49 0.07 0,3 - 0,5 0,5 - 0,9 950 4 1600 60000 6 120 200 V0	D202G20 1.53 0.07 0,3 - 0,5 0,5 - 0,9 1100 4 1750 70000 7.5 120 205 V0	D202G30 1.62 0.07 0,2 - 0,4 0,5 - 0,9 1300 4 1950 95000 9 120 210 V0	E202G15 1.50 0.07 0,3 - 0,5 0,5 - 0,9 920 4 1470 56000 5.5 120 205 V0	1.61 0.07 0,2 - 0,4 0,5 - 0,9 1300 3 2000 93000 8.5 120 210

投級	D201
----	------

玻璃纖維強化級 D201G15

D201G30

防火級 **玻纖強化防火級**  D202 D202G15-G30

玻璃鐵錐強化級E系列 E202G15-G30

# C201, D201G15, D201G30, D202, D202G5-30 UL File No. E107536 (M)

<sup>1.</sup>以上数據僅供參考·貨際數據以產品檢驗報告為準。

<sup>2.</sup> 如有任何特別需求,請洽營業人員,謝謝。



No. : CE/2007/B4310A Date : 2007/12/12

Page : 1 of 5

SHINKONG SYNTHETIC FIBERS CORPORATION

8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN, R. O. C.

TEL: +886-3-4932131 Ext. 1732 FAX: +886-3-4915763

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

THERMOPLASTIC POLYESTER RESIN Sample Description

Style/Item No. : SHINITE ® PBT E202G15BK

Manufacturer/Vendor SHINKONG SYNTHETIC FIBERS CORPORATION

Country of Origin TAIWAN Sample Receiving Date 2007/11/16

**Testing Period** 2007/11/16 TO 2007/11/23

In accordance with the RoHS Directive 2002/95/EC, and its **Test Requested** 

amendment directives.

With reference to IEC 62321, Ed.1 111/54/CDV **Test Method** 

Procedures for the Determination of Levels of Regulated

Substances in Electrotechnical Products.

(1) Determination of Cadmium by ICP-AES.

(2) Determination of Lead by ICP-AES.

(3) Determination of Mercury by ICP-AES.

(4) Determination of Hexavalent Chromium for non-metallic

samples by UV/Vis Spectrometry.

(5) Determination of PBB and PBDE by GC/MS.

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

Chenyu Kung / Operation Manager Signed for and on behalf of

SGS TAIWAN LTD.

Chemical Laboratory - Taipei



No.: CE/2007/B4310A Date: 2007/12/12 Page : 2 of 5

SHINKONG SYNTHETIC FIBERS CORPORATION

8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN, R. O. C.

TEL: +886-3-4932131 Ext. 1732 FAX: +886-3-4915763

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

Took Itom (e):	Method	Result	MDL	
Test Item (s):	(Refer to)	No.1		
Cadmium (Cd)	(1)	n.d.	2	
Lead (Pb)	(2)	14	2	
Mercury (Hg)	(3)	n.d.	2	
Hexavalent Chromium Cr(VI) by alkaline extraction	(4)	n.d.	2	
Sum of PBBs		n.d.	:20	
Monobromobiphenyl		n.d.	5	
Dibromobiphenyl		n.d.	5	
Tribromobiphenyl		n.d.	5	
Tetrabromobiphenyl		n.d.	5	
Pentabromobiphenyl		n.d.	5	
Hex abrom obiphenyl		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)	(5)	n.d.	(10)	
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.	257	

### **TEST PART DESCRIPTION:**

NO.1 BLACK PLASTIC PELLETS

Note: 1. mg/kg = ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

According to 2005/717/EC DecaBDE is exempt.

5. "-" = Not Regulated

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of 帕神神经過數學的 



No.: CE/2007/B4310A Date: 2007/12/12 Page: 3 of 5

SHINKONG SYNTHETIC FIBERS CORPORATION

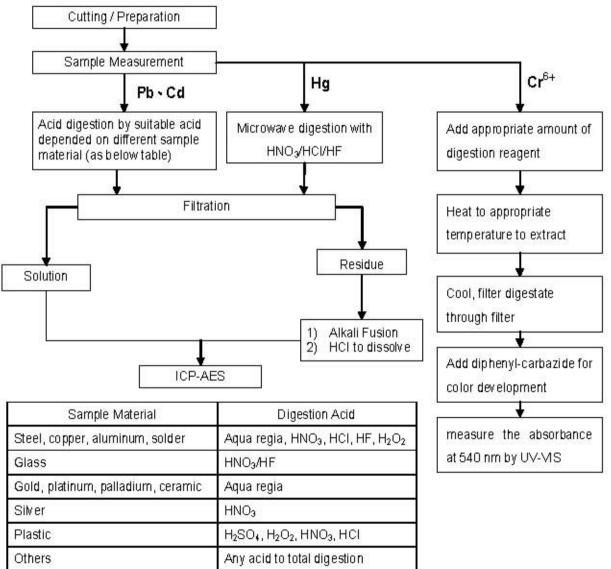
8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN, R. O. C.

TEL: +886-3-4932131 Ext. 1732 FAX: +886-3-4915763



These samples were dissolved totally by pre-conditioning method according to below flow chart.
 (Cr<sup>8+</sup> test method excluded)

- www.DataSheet4U.com 2) Name of the person who made measurement: Troy Chang
  - 3) Name of the person in charge of measurement: Chenyu Kung





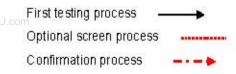
No.: CE/2007/B4310A Date: 2007/12/12 Page : 4 of 5

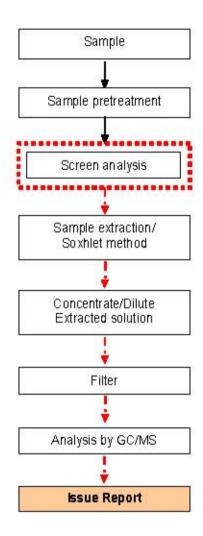
SHINKONG SYNTHETIC FIBERS CORPORATION 8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN, R. O. C.

TEL: +886-3-4932131 Ext. 1732 FAX: +886-3-4915763



## PBB/PBDE analytical FLOW CHART







No.: CE/2007/B4310A Date: 2007/12/12 Page: 5 of 5

SHINKONG SYNTHETIC FIBERS CORPORATION 8F., NO. 123, SEC. 2, NANKING E. RD., TAIPEI, TAIWAN, R. O. C.

TEL: +886-3-4932131 Ext. 1732 FAX: +886-3-4915763





\*\* End of Report \*\*



测试报告

编号: GZ0709142822/CHEM

日期: 2007年10月8日 页码1 of 3

东莞市金乐金属材料有限公司 东莞市虎门镇镇口第二工业区 11 栋之二

以下测试之样品是由申请者所提供及确认: 高精度磷铜 C5191 客户参考信息: 高精度磷铜 C5191

www.DataSheetSGSm参考编号

: GC070906038

收板日期

: 2007 年 9 月 24 日

信息确认日期

: 2007年9月26日

测试门期

: 2007年9月24日至2007年10月8日

测试要求

:按照 RoHS 指令 2002/95/EC 及其修订文件要求进行测试。

测试方法

: 参照 IEC 62321 Ed.1 111/54/CDV 电子电器产品中限用物质含量的测定程序

(1) 用 ICP 测定镉的含量

(2) 用 ICP 测定铅的含量

(3) 用 ICP 测定汞的含量

(4) 用比色法测定六价铬的含量

测试结果

:请参见下一页

测试结论

:基于所送样品进行的测试,测试结果与欧盟 RoHS 指令 2002/95/EC 以及后续修正指令的要

求相符。

Signed for and on behalf of SGS-CSTC Ltd.

Huang Fang, Sunny Sr. Engineer

This Test Repurshissued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sgs.com. Attaction is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offertiers and the proseduted to the fullest extent of the law.



# 测试报告

编号: GZ0709142822/CHEM

日期: 2007年10月8日 页码 2 of 3

测试结果 (单位:毫克/千克):

测试项目	参考方法	No.1	MDL	RoHS 限值
镧 (Cd)	(1)	N.D.	2	100
指 (Pb)	(2)	18	2	1000
汞 (Hg)	(3)	N.D.	2	1000
沸水萃取法测六价铬(Cr VI)	(4)	Negative	参见 注释 4	#

测试部件描述:

No.1 铜色金属片

注释: 1. 毫克/千克 = ppm

- 2. N.D.= 未检出 (< MDL)
- 3. MDL = 方法检测限
- 4. 点测试:

Negative = 未检测到六价铬, Positive = 检测到六价铬;

(如果点测试结果不能确认,测试样品将进一步由沸水萃取法进行测试)。

沸水萃取法:

Negative = 未检测到六价铬

Positive = 检测到六价铬:每 50 cm² 表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于 0.02 mg/kg。

- 5. # Positive = 阳性,表示结果与 RoHS 要求相抵触 Negative = 阴性,表示结果与 RoHS 要求不相抵触
- 6. 本测试报告内容是参照报告编号为 GZ0709142821/CHEM 的中文译本, 中英文版本如有歧异, 概以英文版为准。

This Test Reput issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.seys.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offer iders in the proseduted to the fullest extent of the law.

0663 t (86-20) 82155555 0663 t (86-20) 82155555 f (86-20) 82075**7277W. DataSheet 41.6.com** f (86-20) 82075125 e sgs.china@sgs.com



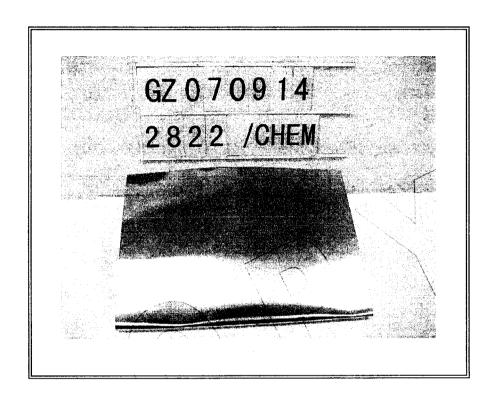
测试报告

编号: GZ0709142822/CHEM

日期: 2007年10月8日 页码3 of 3

样品照片:

v DataSheet4U con



此图片仅限于随 SGS 正本报告使用

\*\*\* 报告完 \*\*\*

This Test separation is sued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.gs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in the test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offertiders in the prosequent to the fullest extent of the law.

需要家CUSTOME		軍中国			殿	IN	SPECT	ION C	ERTIF	ICATE		KURAMI		KO METAL MANUF	
极 先 MESSRS.	同朋	香港 有限				DATE C	F ISSUE		年03月2	8 B	000	2			
PRODUCT	S		H (190-			納品書書号 57166  DELIVERY SHEET NO. 注文番号 NK5-0303  CONTRACT NO.									
SIZE	0.	25 X	305 X	L								保 証		11. 110. 1	
SPECIFIE	规格 SPECIFICATION				オーダ ORDER	一番号 NO.	03				R OF QUALI NCE SECTIO		Hinospo Wateralia		
	CAL CO	分 MPOSITION	\$						-						
規 SPECIFIC	格 ATION	Zn.	S n %	P %	Fe %	Рь %	Cu+Sn+P			**					質量 MASS
製造番号	MIN		5.5	0.05		130	99.7								(KG)
LOT NO.	MAX	0.20	7.0	0.26	0.10	0.05									
62512		0.01	5,99	0.12	0.003	0.002	99.96			-		-			5,136.00
	# Ad-	- h	15 86 258	No se s											
			び 物 理 CAL PROPERT		PL .										
規	格	引張強さ	伸 び ELONGATION	硬き		,							٠.,	寸法検査 DIMENSIONAL INSPECTIONS	GOOD
		N/mm	%	HV										外観検査	GOOD
製造番号			8.0	190									,	SURFACE	
LOT NO.	MAX	685		210						-		-		INSPECTIONS	
62512	1	615	17.6	203.0								,		備考 REMARKS.	
-														_	
www Data															

Sheel の製品は品質管理計画に基づき製造され、検査・試験を行ない、規格に合格したことを証明する。 色WE HEREBY CERTIFY THAT THE PRODUCTS DESCRIBED HEREIN HAVE BEEN MANUFACTURED, INSPECTED AND TESTED IN ACCORDANCE WITH THE SPECIFICATION AND Q.C. PROGRAM.

# Mill Test Certificate/검사증명서

Certificate No./증명서번호:050929-KCSE-001-001 Date of Issue/발행일자:Sep., 30, 2005

Order No./계약번호:0002260731

Supplier/주문자:SSANGYONG CORPORAT!ON

PO No./주문번호:2260731 (G5711) Commodity/품명:CR COIL

Customer/고객사:GOLDBASE STEEL CO., LTD

Spec & Type/규덕:JIS G3141 SPCC-SD

Spec & Type: # 41.55 G3141 SPCC-SD											
Size/ <u></u>	Product No. 제품번호	Qua- ntity 수량	Weight 중량 (kg)	Heat No. 제강번호	N 0 1 1 1 2 0 4	ΥP	e/인장/ TS	(%)	Hard- ness /경도 HRB	ðase Metal Bend	S C Si Mn P S
0.50x1245xC	CPW3809AA	1	5,420	SP33155	T	179	309	47	36.7	Good	L 24 Tr 54 108 96
0.50x1245xC	CPW3809B	1	8,330	SP33155	7	179	309	47	36.7	Good	
0.50x1245xC	CPW3809C	1	7,820	SP33155	1	179	309	47	36.7	Good	
0.50x1245xC	CPW5413A	1	7,960	SP33155	1	170	300	47	37.4	G:od	1 1 2 1 1 2 1
0.50x1245xC	CPW5413B	1	8,010	SP33155	7	170	300	47	37.4	Good	L 24 Tr 54 108 96
0.50x1245xC	CPW5413C	1	7,520	SP33155	Т	170	300	47	37-4	Gixod	
	910 )		6				160 (kg)			Vei:1 >	L 24 Tr 54 108 36
0.60x1219xC	CRW2807A	1	8,680	SP33155	Ţ	164	299	48	34.5	Gcud	L 24 Tr 54 108 96
0.60x1219xC	CRW28079	1	8,680	SP33155	Т	164	299	48	34.5	Good	! !
0.60x1219xC	CRW2807CA	1	8,370	SP33155	T	164	299	48	34.5	Good	L 24 Tr 54 108 96
0.60x1219xC	CRW2808A	1	6,700	SP33155	T	165	297	48	35.3	Good	L 24 Tr 54 108 96
0.60x1219xC	CRW2808B	1	6,520	SP33155	7	165	297	48	35.3	Good	L 24 Tr 54 108 96
0.60x1219xC	CRW2808C	1	6,520	SP33155	T	165	297	48	35.3	Good	L 24 Tr 54 108 96 L 24 Tr 54 108 96
0.60x1219xC	CRW2808D	F	6,380	SP33155	7	165	297	48	35.3	Good	
*** Sub Total (	20)		7	,	1		59 (kg)		< No V		L 24 Tr 54 108 96
0.70x1219xC	CRW2837A	1	8,580	SP33155	7	178	312	47	36.7	Good	1 24 T- 54 400 00
0.70x1219xC	CRW2837B	1	8,580	SP33155	7	178	312	47	36.7	Good	L 24 Tr 54 108 96
0.70x1219xC	CRW2837C	1	8,590	SP33155	-	178	312	47	36.7	Good	L 24 Tr 54 108 96
Sub Total (	30)***		3		1		312 50 (kg)				L 24 Tr 54 108 96
t Dealer		1				٤٠,١	JU (NG)		< No 1	ASIO >	
* Position - T : Top, M :	Middle B · Rottom										7 7 60

Position - T : Top, M : Middle, B : Bottom

We hereby certify that the material herein has been made in accordance

\* This Mill Test Certificate cannot be copied for any purpose.



Surveyor To:

DM BO

<sup>\*</sup> Tensile Test. Direction: Longitudinal, Gauge Length: 50mm(Rectangular),

<sup>\*</sup> Division - L:Ladie Analysis \* Tr(Trace)

<sup>\*</sup> Chemical Composition Unit: -2:x1/100, -3:x1/1000, -4:x1/10000, -5:x1/100000



No. CANEC0801144001

Date: 22 Mar 2008

Page 1 of 3

CIXI ZHANGQI HENG FENG WU JIN FACTORY NEAR OF NO.329 NATIONAL HIGHWAY ZHANGQI TOWN CIXI CITY ZHEJIANG PROVINCE CHINA

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

hardware fitting

SGS Job No.

10914687 - GZ

Client Reference Information :

screw aquare Base stud

Date of Sample Received

26 Jul 2007

Testing Period

28 Jul 2007 - 01 Aug 2007

Test Requested

To determine the Cadmium, Lead, Mercury & Hexavalent Chromium

content in the submitted sample.

Test Method

With reference to IEC 62321 Ed.1 111/54/CDV Procedures for the Determination of Levels of Regulated Substances in Electrotechnical

Products.

Determination of Cadmium by ICP. Determination of Lead by ICP. Determination of Mercury by ICP.

Determination of Hexavalent Chromium by Colonimetric Method.

Test Results

Please refer to next page(s).

Signed for and on behalf of SGS-CSTC Ltd.

Huang Fang, Sunny

Sr. Engineer

This document is issued by the Company under its German found is and Service printed over our or available on request and accessive at http://www.ags.com/terris\_and\_conditions. term. Attention is done to the first of all labelity, indemnities on and jurishing the control for the company of findings at the time of its intervention and your within the times of Chart's Instructions, if any. The Company's election parties to a transaction has executing at their ingression and one of the company and printed the company of the company.

| Mikely ProgSDB 19th Pat 3 Aryon (Committe Entrology Septembrill Complete, Chro 5 10963) 中国,广州,经济技术开发区村学校各球路198号 邮络: 510663

1 (96-20) 52155555

1 (86-20) 82075125 1186 43, 82075 WWW.DataSheet 4Ucom

Member of the SGS Group (SGS SA)

GZCM1968396

(90-20) 921 555 55



No. CANEC0801144001

Date: 22 Mar 2008

Page 2 of 3

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

Tost Item(s)	Method (Refer to)	No.1	MDL
Cadmium(Cd)	(1)	14	2
Lead (Pb)	(1)	25978	2
Mercury (Hg)	(1)	N.D.	2
Hexavalent Chromium (CrVI) by boiling water	(2)	Negative	See Note 4

# www.Data**@xtractlon**m **Note:**

- 1. mg/kg = ppm
- 2. N.D. = Not Detected (< MDL)
- 3. MDL = Method Detection Limit
- Spot-lest:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative - Absence of CrVI coating

Positive = Presence of CrVI coating, the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

Results & photo(s) of this report refer to test report CANECO700150200.

### Test Part Description

No. 1 Silvery metal part

The document is issued by the Company under its Conoral Consistencial Service printed avertised in available on request and access bits at http://www.ega.com/terms\_and\_conditions.tom. Abortion is drawn to the timeston of tendity incompilitation and principles of the timeston of tendity incompilitation and principles in a function of the timeston of the timeston and the finite of Client's instructions. If any, The Company's one responsibility is turts Client and trial documents are interested in the Available principle of the Available principle of the Available principle of the Available of the Company's an engage of the document is unlawfully and offenders may so procedured to the future extend of the low.

Interest in terms of the company of the document is unlawfully and offenders may so procedured to the future extend of the low.

This document cannot be reproduced and such completely approached by the Company.

1 (56-20) 82156556 1 (86-20) 82155555 f (85-20) 52075125

www.cn.sgs.com

r pseciment www.DataSheet4U.com

Member of the SGS Group (SGS SA)



No. CANEC0801144001

Date: 22 Mar 2008

Page 3 of 3

Sample photo:



SGS authenticate the photo on original report only \*\*\* End of Report \*

This document is asserd by the Company under its General Conditions of Bar side printed everload or available on request and assersable at http://www.ags.com/lonns\_and\_conditions.

Inc. Attention is drawn to the thicknist of disability, indemnification and unsolithin teames relified therein. Any holder or this decument is advised had information contained hereon in the termination of the time of the line work on only and within the times of Cland's Individuals. If any, The Company or tole responsibility is to be Claim this individuals. If any, the Company or tole responsibility is to be Claim this individual and the time of the times and obligations under the transaction durantees. Any unauthorized absention, torgoty or following the containing of the company of the document of this document of unlawful and offenders may be prosecuted to include extent of the law.

Individual interest and provide shown in this text report rate only to the sample of providing and retained for 30 days only. The occument cannot be reported as a part in that attend provide shown in this text report rate only to the sample of providing and providing the company.

GZCM1968398

| 選ぶされ Real(S)更行日 4For Sony A or Format A federacy Executory Exercises extra Cine 5 1 0 8 8 2 中国,广州,经济技术开发区科学版科珠路188号 邮第:510883

1 (56-20) 821,5555 F (56-20) S21 56555

1 (86-20) 82075125 r (sc. 20) 8207 5 WWW. DataSheet 4 U. Com

16 Au/Ni/Brass				(U")07	7/11 STD	d Coll.	2 Abs.	1
				THICI	KNESS MEA	ASUREMENT		
MEAN TOP COAT		=	1.06u"					
STD, DEVIATION		=	0.176u"					
NO. OF MEAS.		=	10					
MEAN INT COAT		=	54.321u"					
STD, DEVIATION		=	3.454u"					
NO. OF MEAS.		=	10					
							Au	Ni
T meas		=	10 s	N=	1	THICKNESS	=1.08u'' =	52.59u"
LOCATE SPECIMEN				N=	2	THICKNESS	=1.01u'' =	54.39u"
TO MEASURE	PRESS	"	GO "	N=	3	THICKNESS	=1.05u'' =	53.54u"
				N=	4	THICKNESS	=1.06u" =	55.96u"
Xt1=0.009	Xn=	(	0.079	N=	5	THICKNESS	=1.04u" =	53.12u"
							20	006/10/13

16 Tin/Ni/P-Bronze			(U")7/8	STD	d Coll.	2 Abs.	1
			THICKN	NESS MEA	SUREMENT		
MEAN TOP COAT		= 50.321u"					
STD, DEVIATION		= 3.454u"					
NO. OF MEAS.		= 10					
MEAN TOP COAT		= 100.08u"					
STD, DEVIATION		= 6.363u"					
NO. OF MEAS.		= 10					
						Tin	Ni
T meas		= 10  s	N=	1	THICKNESS	=100.03u'' =	50.51u"
LOCATE SPECIMEN			N=	2	THICKNESS	=100.07u'' =	50.10u"
TO MEASURE	PRESS	" GO "	N=	3	THICKNESS	=100.04u'' =	50.24u"
			N=	4	THICKNESS	=100.05u" =	50.37u"
Xt1=	Xn=		N=	5	THICKNESS	=100.09u" =	50.15u"
						20	006/12/13



No. CANEC0800111003

Date: 16 Jan 2008

Page 1 of 3

SHENZHEN HONGJUN HARDWARE CO., LTD. NO.3, DALANG INDUSTRY AREA, HONGXING VILLAGE SONGGANG TOWN, BAO'AN DISTRICT, SHENZHEN CHINA

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

AU PLATING

10787280 - SZ SGS Job No.

4.3 SGS Internal Reference No.

Date of Sample Received 11 Jan 2008

11 Jan 2008 - 16 Jan 2008 **Testing Period** 

To determine the Cadmium, Lead, Mercury & Hexavalent Chromium Test Requested

content in the submitted sample.

With reference to IEC 62321 Ed.1 111/54/CDV Procedures for the Test Method

Determination of Levels of Regulated Substances in Electrotechnical

(1) Determination of Cadmium by ICP.

Determination of Lead by ICP. Determination of Mercury by ICP.

Determination of Hexavalent Chromium by Colorimetric Method.

Please refer to next page(s). **Test Results** 

Signed for and on behalf of SGS-CSTC Ltd.

Huang Fang, Sunny

Sr. Engineer

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.ses.com. Attendor is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the resorts shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders make prosecuted to the fullest extent of the law.



No. CANEC0800111003

Date: 16 Jan 2008

Page 2 of 3

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

Test Item(s)	Method (Refer to)	No.1	MDL
Cadmium(Cd)	(1)	N.D.	2
Lead (Pb)	(1)	22	2
Mercury (Hg)	(1)	N.D.	2
Hexavalent Chromium (CrVI) by boiling water extraction	(2)	Negative	See Note 4

#### Note:

- 1. mg/kg = ppm
- 2. N.D. = Not Detected (< MDL)
- 3. MDL = Method Detection Limit
- 4. Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

### **Test Part Description**

No. 1 Golden/silvery plated metal

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.ses.com. Attantion is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this lest report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be secured to the fullest extent of the law.

GZCM 1912543

SGS-CSTC Strong Technical Services Ltd.

Guenanhou Branch Conservices Laboratory

198 Kezhu Road, SCIENTECH Park Guangzhou Economic & Technology Development Detricl, Guangzhou, China 510663 中国,广州,经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 t (86-20) 82155555

f (86-20) 82075125 f (86-20) 82075125 www.cn.sgs.com



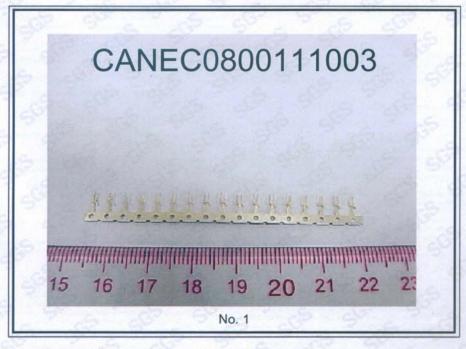
No. CANEC0800111003

Date: 16 Jan 2008

Page 3 of 3

Sample photo:

w DataSheet4U con



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sex.ebin. Afternon is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be content or appearance of the fullest extent of the law.

Branch Manias By Cal Laboratory

198 Kezhu Road SCIENTECH Park Guangzhou Economic & Technology Development District Guangzhou China 510663 中国 - 广州 - 经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 t (86-20) 82155555 f (86-20) 82075125 f (86-20) 82075125

www.cn.sgs.com

www.DataSheet4U.com



No. CANEC0800111004

Date: 16 Jan 2008

Page 1 of 3

SHENZHEN HONGJUN HARDWARE CO., LTD. NO.3, DALANG INDUSTRY AREA, HONGXING VILLAGE SONGGANG TOWN, BAO'AN DISTRICT, SHENZHEN CHINA

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

NI PLATING

10787280 - SZ SGS Job No.

4.4 SGS Internal Reference No.

11 Jan 2008 Date of Sample Received

11 Jan 2008 - 16 Jan 2008 **Testing Period** 

Test Requested To determine the Cadmium, Lead, Mercury & Hexavalent Chromium

content in the submitted sample.

With reference to IEC 62321 Ed.1 111/54/CDV Procedures for the Test Method

Determination of Levels of Regulated Substances in Electrotechnical

Determination of Cadmium by ICP. Determination of Lead by ICP.

Determination of Mercury by ICP.

Determination of Hexavalent Chromium by Colorimetric Method.

**Test Results** Please refer to next page(s).

Signed for and on behalf of SGS-CSTC Ltd.

Huang Fang, Sunny

Sr. Engineer

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.ses.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be secured to the fullest extent of the law.



No. CANEC0800111004

Date: 16 Jan 2008

Page 2 of 3

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

Test Item(s)	Method (Refer to)	No.1	MDL
Cadmium(Cd)	(1)	N.D.	2
Lead (Pb)	(1)	19	2
Mercury (Hg)	(1)	N.D.	2
Hexavalent Chromium (CrVI) by boiling water extraction	(2)	Negative	See Note 4

#### Note:

- 1. mg/kg = ppm
- 2. N.D. = Not Detected (< MDL)
- 3. MDL = Method Detection Limit
- 4. Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

#### **Test Part Description**

No. 1 Silvery plated metal

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.sec.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated shown in this est report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written on of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and is many properties and the fullest extent of the law. offenders make

1912546

198 Kezhu Road SCIENTECH Park Guangzhou Economic & Technology Development District Guangzhou, China 5 1 0 6 6 3 中国·广州·经济技术开发区科学城科珠路198号 邮编:510663

t (86-20) 82155555 t (86-20) 82155555

f (86-20) 82075125 www.cn.sgs.com f (86-20) 82075125

www.DataSheet4U.com



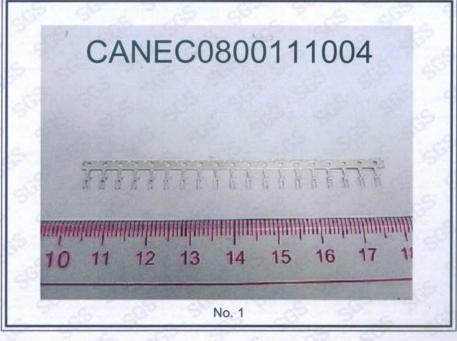
No. CANEC0800111004

Date: 16 Jan 2008

Page 3 of 3

Sample photo:

w Data Sheet All com



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.ses.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be secured to the fullest extent of the law.

GZCM 191254

SGS-CSTC STECHNICAL Services Ltd.
Guangzhou Branch Wigner Laboratory



No. CANEC0800111001

Date: 16 Jan 2008

Page 1 of 3

SHENZHEN HONGJUN HARDWARE CO., LTD. NO.3, DALANG INDUSTRY AREA, HONGXING VILLAGE SONGGANG TOWN, BAO'AN DISTRICT, SHENZHEN CHINA

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

MATTE SN PLATING

10787280 - SZ SGS Job No.

SGS Internal Reference No. 4.1

Date of Sample Received 11 Jan 2008

**Testing Period** 11 Jan 2008 - 16 Jan 2008

Test Requested To determine the Cadmium, Lead, Mercury & Hexavalent Chromium

content in the submitted sample.

With reference to IEC 62321 Ed.1 111/54/CDV Procedures for the Test Method

Determination of Levels of Regulated Substances in Electrotechnical

Products.

Determination of Cadmium by ICP. Determination of Lead by ICP. Determination of Mercury by ICP.

Determination of Hexavalent Chromium by Colorimetric Method.

**Test Results** Please refer to next page(s).

Signed for and on behalf of SGS-CSTC Ltd.

Huang Fang, Sunny

Sr. Engineer

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.second. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this lest report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be provided to the fullest extent of the law.

> 198 Kezhu Road, SCIENTECH Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 t (86-20) 82155555 f (86-20) 82075125 www. Data Sheet 4U.com



No. CANEC0800111001

Date: 16 Jan 2008

Page 2 of 3

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

Test Item(s)	Method (Refer to)	No.1	MDL
Cadmium(Cd)	(1)	N.D.	2
Lead (Pb)	(1)	18	2
eMercury (Hg)	(1)	N.D.	2
Hexavalent Chromium (CrVI) by boiling water extraction	(2)	Negative	See Note 4

#### Note:

- 1. mg/kg = ppm
- 2. N.D. = Not Detected (< MDL)
- 3. MDL = Method Detection Limit
- 4. Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

## Test Part Description

No. 1 Silvery plated metal

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.ses.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be a content of the fullest extent of the law.

GZCM 1912537

the shoreston of

198 Kezhu Road SCIENTECH Park Guangzhou Economic & Technology Development District Guangzhou, China 510663 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 t (86-20) 82155555



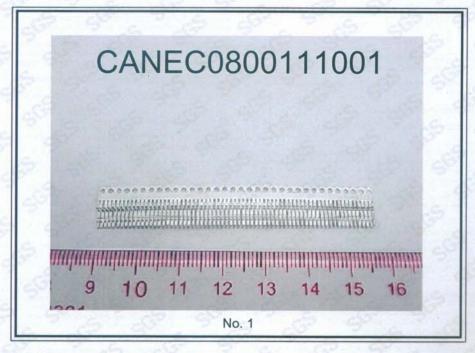
No. CANEC0800111001

Date: 16 Jan 2008

Page 3 of 3

Sample photo:

w DataSheet4U com



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or available on request and accessible at www.ses.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be secured to the fullest extent of the law.

GZCM 1912538



### ONLINE CERTIFICATIONS DIRECTORY

OCD Home Quick Guide Contact Us UL.

#### ECBT2.E144392

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

Page Bottom

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

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

#### **NELTRON INDUSTRIAL CO LTD**

E144392

2ND FL 184 CHENG-TEH RD, SEC 4 SHIH-LIN, TAIPEI 111 TAIWAN

Wire to board connectors, Cat. Nos. 1310, 1311, 5289H followed by -02 thru -15; Cat. Nos. 8982H, 8980H, 8981H followed by -04; Cat. Nos. 2317RB, 2317RJ, 2317SB, 2317SJ, 2318HB, 2318HJ, 2417RJ, 2417SJ, 2418HJ followed by -02 thru -15; Cat. No. 2226A followed by -01 thru -40; Cat. No. 2226B followed by -02 thru -80; Cat. No. 2221 followed by -06, -12; Cat. No. 2222 followed by -06; Cat. No. 2220 followed by -02 thru -16; Cat. Nos. 2217R, 2217S, 2219R, 2219S followed by -02 thru -15; Cat. No. 2218H followed by -01 thru -15; Cat. No. 2026A followed by -01 thru -40; Cat. No. 2026B followed by -02 thru -80; Cat. No. 4400 followed by -44; Cat. No. 4401 followed by -10, -14, -16, -20, -24, -26, -30, -34, -40, -50, -60, -64; Cat. No. 4402 followed by -10, -14, -16, -20, -26, -34, -40, -44, -50, -60, -64; Cat. No. 4403 followed by -10, -14, -16, -20, -26, -30, -34, -40, -50, -60; Cat. No. 4404 followed by -14, -16, -18, -20; Cat. No. 4405 followed by -10, -14, -16, -20, -26; Cat. No. 4406 followed by -10, -14, -16, -20, -24, -26, -30, -34, -40, -50, -60, -64; Cat. No. 4501 followed by -20, -26, -32, -34, -40, -50, -52, -60, -68, -80, -100; Cat. No. 1200 followed by -03 thru -09; Cat. No. 1005 followed by -50, -100.

P.C.B connectors, Cat. No. 2162 followed by -16, -18, -20, -24; Cat. No. 2227 followed by -08, -14, -16, -18, -20, -24, -28, -40; Cat. No. 6605 followed by -72; Cat. No. 6602 followed by -30, -60; Cat. Nos. 1007, 1008 followed by -14, -20, -26, -30, -40, -50, -60, -68, -80, -100; Cat. No. 6601 followed by -20, -28, -32, -44, -52, -68, -84; Cat. No. 6603 followed by -68, -84, -85, -114, -121, -132; Cat. No. 1201 followed by -03 thru -08; Cat. No. 1202 followed by -05; Cat. No. 2416S followed by -20, -26, -32, -34, -40, -50, -52, -60, -68, -80, -100; Cat. Nos. 2216R, 2216S followed by -10, -12, -14, -16, -20, -24, -26, -30, -34, -40, -50, -56, -60, -64; Cat. Nos. 2516R, 2516S followed by -20, -26, -32, -34, -40, -50, -52, -60, -68, -80, -100; Cat. Nos. 2223R, 2223S followed by -02 thru -21; Cat. No. 2323S followed by -02 thru -20; Cat. No. 2316S followed by -10, -14, -16, -20, -26, -30, -34, -40, -50, -60, -64; Cat. No. 2525 followed by -10, -12, -20, -30, -40, -50, -60, -80, -100, -120; Cat. No. 2314S followed by -20, -26, -32, -34, -40, -50, -52, -60, -68, -80, -100; Cat. No. 2224 followed by -02 thru -15; Cat. Nos. 2211R, 2211S followed by -01 thru -40.

Cat. Nos. 2213R, 2213S followed by -02 thru -80; Cat. No. 2212S followed by -02 thru -40; Cat. No. 2214S followed by -02 thru -80; Cat. Nos. 2215R, 2215S followed by -10, -12, -16, -18, -20, -26, -30, -34, -40, -50, -60; Cat. No. 2225 followed by -36, -44, -50, 62, -80, -86, -100; Cat. No. 2207S followed by -02 thru -80; Cat. Nos. 2208R, 2208S followed by -02 thru -80; Cat. No. 2209S followed by -01 thru -40; Cat. Nos. 2210R, 2210S followed by -01 thru -40; Cat. No. 2206S followed by -01 thru -30; Cat. No. 41612 followed by -32, -48, -64, -96.

Mini jumpers, Cat. Nos. 2205, 2228 followed by -02.

Wire to wire connectors, Cat. No. 8182 followed by -04; Cat. Nos. 5005, 5006 followed by -01, -02, -03, -04A, -04B, -05, -06, -09, -12, -15.

D-Sub connectors, Cat. Nos. 5514P, 5514R followed by -13; Cat. Nos. 5512P, 5512S followed by -15, -26, -44, -62; Cat. No. 5511 followed by -09, -15, -25; Cat. No. 5510 followed by -15; Cat. Nos. 5509P, 5509S followed by -15, -26, -62; Cat. Nos. 5508P, 5508S followed by -15, -26, -44, -62; Cat. Nos. 5506P, 5506S followed by -09, -15, -25, -37; Cat. Nos. 5504PF1, 5504SF1, 5504SF2, 5505F1, 5505F2, 5503S, 5503P followed by -09, -15, -25, -37; Cat. Nos. 5501P, 5501S, 5502 followed by -09, -15, -19, -23, -25, -37, -50.

Centronic connectors, Cat No. 5701 followed by -14, -24, -36; Cat. Nos. 5702, 5703, 5706 followed by -40; Cat. No. 5704 followed by -30; Cat. No. 5707 followed by -20. www.DataSheet4U.com

**Scart connectors**, Cat. Nos. 1109, 1111, 1113 followed by -21; Cat. Nos. 1009, 1011, 1013 followed by -21; Cat. Nos. 1114R, 1114S followed by -21.

Connectors, Model No. 1002S followed by 30, 40, 50, 60 or 68; Model No. 1003-P-50; Model No. 1010 followed by 50 or 68, followed by P-PN; Model No. 1211 followed by 04, 06 or 08, followed by 04, 06 or 08; Model No. 1223 followed by -04 thru 30, followed by 02 or 03; Model No. 1224S followed by 04 thru 27; Model No. 1224SM followed by 04 thru 30; Model No. 1230S followed by 04 thru 15; Model No. 1230R followed by 04 thru 30; Model No. 1250HM followed by 02 thru 15; Model No. 1251SM followed by 02 thru 15; Model No. 1251RM followed by 02 thru 15; Model No. 1251S followed by 02 thru 15, followed by SMD; Model No. 1251R followed by 02 thru 15, followed by SMD; Model No. 1310H followed by 02 thru 15; Model No. 1394-06; Model No. 1778 followed by 16, 20, 22, 24, 28, 30, 32, 40, 42, 48, 52, 54, 56 or 64, followed by 03, 04 or 06; Model No. 1778MC followed by 16, 20, 24, 28, 30, 40, 42, 48, 52, 56 or 64, followed by 03, 04, 06 or 075; Model No. 1999P followed by 04 thru 80; Model No. 1999S followed by 04 thru 120, followed by A1, A2 or A3, followed by B1, B2 or B3; Model No. 2006H followed by 01, thru 06; Model No. 2006S followed by 01 thru 05; Model No. 2010 followed by 10 thru 12, followed by H1, H2, H3 or H4; Model No. 2011-10; Model No. 2016 followed by 10, 12, 14, 16, 20, 22, 24, 26, 30, 34, 36, 40, 44, 50, 60, 64 or 68; Model No. 2018 followed by P or R, followed by 02 thru 12; Model No. 2099P followed by 04 thru 10; Model 2099S followed by 04 thru 14; Model No. 2100P followed by 06 thru 20; Model 2100S followed by 04 thru 10; Model No. 2110 followed by 20, 30, 40, 50, 60, 80 or 100, followed by 34 or 44, followed by MM; Model No. 2114 followed by R, H or S, followed by 02 thru 10; Model No. 2150-08; Model No. 2198S followed by 10, 24, 30, 40, 44, 50, 60, 70, 80, 90 or 100, followed by A1 or A2; Model No. 2199SA followed by 04 thru 30, followed by 01 thru 03; Model No. 2199SB followed by 02 thru 10, followed by A1, A2 or A3, followed by B1 or B2, followed by C1 or C2; Model No. 2199R followed by 0 or 5, followed by 04 thru 30, followed by A1, A2 or A3, followed by B1 or B2, followed by C1 or C2; Model No. 2200SA followed by 05 thru 50, followed by A1 or A2; Model No. 2200SB followed by 10 thru 50, followed by A1 or A2; Model No. 2204 followed by S or R, followed by 02 thru 30; Model No. 2206SA followed by 01 thru 36, followed by 46; Model No. 2206SB followed by 02 thru 16, followed by 46; Model No. 2206PA followed by 01 thru 36, followed by 739; Model No. 2206PB followed by 02 thru 50, followed by 739; Model No. 2227MC followed by 06, 08, 10, 14, 16, 18, 20, 22, 24, 28, 32, 36, 40, 42, 48 or 64, followed by 03, 06 or 09; Model No. 2233 followed by S or R, followed by 03 thru 120; Model No. 2317 followed by SEH or REH, followed by 02 thru 15; Model No. 2317 followed by RM or SM, followed by 02 thru 10; Model No. 2318 followed by HM or HEH, followed by 02 thru 15; Model No. 2323 followed by R or S, followed by 04 thru 23, followed by A or B; Model No. 1016 followed by 09 or 15; Model No. 2007H followed by 02 thru 06; Model No. 2007S followed by 02 thru 05; Model No. 2324S followed by 04 thru 22; Model No. 2324R followed by 03 thru 30; Model No. 2392-5100; Model No. 2417 followed by SB or RB, followed by 02 thru 08; Model No. 2418HB followed by 02 thru 15; Model No. 3750R followed by 02 thru 12; Model No. 3750S followed by 02 or 03; Model No. 3920 followed by 02, 03, 04, 06, 09 or 12; Model No. 3921 followed by 02, 03, 04, 06, 09 or 12; Model No. 41815 followed by R, S or BE, followed by 02 thru 10; Model No. 4407 followed by 10, 14, 16, 20, 26, 34, 40, 50, 60 or 64; Model No. 4408 followed by 10, 12, 16, 20, 24, 26, 30, 34, 40 or 44; Model Nos. 5075AS-04, 5075BR-04, 5075AR-08B, 5075AR-04; Model No. 5197H followed by 02 thru 12; Model No. 5197 followed by S or R, followed by 02 thru 04, may be followed by 01; Model No. 5504F3-09P; Model No. 5513S followed by 3W3, 5W1, 7W2, 8W8, 11W1 or 13W3; Model No. 5515-13W3; Model No. 5557 followed by 02, 04, 06, 08, 10, 12, 14, 16, 18 or 20; Model No. 5559 followed by 02, 04, 06, 08, 10, 12 or 14; Model No. 5566S followed by 02, 04, 06, 08, 10,12, 14, 16, 18 or 20; Model No. 5569R followed by 02, 04, 06, 08, 10, 12, 14, 16, 18 or 20, may be followed by 01; Model No. 6127 followed by S or P, followed by 02 thru 31; Model No. 6604P followed by 01 thru 40, followed by 9.1, 10.0, 10.6, 12.1 or 13.7; Model No. 6604S followed by 01 thru 40, may be followed by WR; Model No. 6610-321; Model No. 6610P-321, 6615-168-LE; Model No. 8981 followed by SA, SM or R, followed by O4; Model No. 8982S followed by 02 thru 08; Model No. SQJ followed by 24S, 26S, 28S, 28L, 32S or 40L; Model No. 4410-40.

Models 5589, 5321, 5592, 5594.

Cat. No. 1223, followed by 03 thru 32, followed by T or G; Cat. No. 1224R, followed by 03 thru 30; Cat. No. 1226, followed by 04 thru 50, followed by T or G; Cat. No. 1227, followed by S, R or SM, followed by 03 thru 30; Cat. No. 1253R, followed by 02 thru 16, 18, 20, 22, 24, 26, 28 or 30, followed by T or G; Cat. No. 1255R, followed by 02 thru 15, 20, 25 or 30; Cat. No. 1600, followed by S or R, followed by 02 thru 15 or 20, followed by T or G; Cat. Nos. 2000P, 2001S, followed by 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 50, 60, 70, 80, 100, 120, followed by G; Cat. No. 2017, followed by SM, S or R, followed by 10, 12, 14, 16, 20, 22, 24, 26, 30, 34, 40, 44, 50, 60, followed by G; Cat. Nos. 2208, 2213, followed by DI, S, R, SM or SMDI, followed by 02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80, followed by G, T or SG; Cat. No. 2209, followed by SM1, SM or S, followed by 2 thru 15, 18, 20, 23, 25, 28, 30, 33, 35, 38 or 40, followed by G, SG, SV or T; Cat. No. 2210, followed by DI, S, R, SM or SMDI, followed by 02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40, followed by T or G; Cat. Nos. 2217S2, followed by 02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40, followed by T or G; Cat. Nos. 2217S2, followed by 02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40, followed by G, T or SG; Cat. Nos. 4409AP, 4409A, 4409SM, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24 or 26.

Low voltage connectors, Cat. No. 2350SM-02.

32G, followed by 03 or 06; Cat. No. 2228P followed by 2 thru 10; Cat. No. 2234S followed by 96; Cat. No. 2316113 followed by 64G, followed by A, B or C; Cat. No. 231682-3404 followed by 001 thru 006; Cat. No. 2317 followed by SD or RD, followed by 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 or 16; Cat. No. 2325 followed by 18/36, 20/40, 22/44, 28/56, 30/60, 36/72, 40/80, 43/86 or 50/100, followed by L1 or L2; Cat. No. 2392-5100; Cat. No. 2400SM followed by 02, 03 or 04, maybe followed by T1, T2 or T3; Cat. No. 2417 followed by SJ or RJ, followed by 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 or 32, followed by PHD; Cat. No. 2425 followed by 40, 44, 56, 60, 86 or 100, followed by L1 or L2; Cat. No. 2525 followed by 200; Cat. No. 2526-242-SLOT1; Cat. No. 2710-06 followed by one alphanumeric digit; Cat. No. 4110SM followed by 07, followed by A1, A2 or A3, followed by M; Cat. No. 4120SM followed by 09; Cat. No. 4130SM followed by 10; Cat. Nos. 5075BMR-04-SM, 5075BMR-05-SM, 5075AMR1-04-SM; Cat. No. 5075BS followed by 04, followed by WH; Cat. No. 5075AUR followed by 04; Cat. Nos. 5075ARP-04, 5075ARP-04-SMD; Cat. No. 5198 followed by S or R, followed by 2 thru 10; Cat. No. 6604SB followed by 40WR; Cat. No. 6801S followed by 50, followed by T1B3; Cat. Nos. ICA-501-006, ICA-501-008.

Cat. No. 1320H followed by 02 thru 12; Cat. No. 5560 followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18; Cat. No. 5561 followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18; Cat. No. 5561S followed by 02, 04, 06, 08, 10, 12, 14, 16, 18; Cat. No. 5561S followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18, followed by T, followed by SM or SM1; Cat. No. 5561R followed by 02, 04, 06, 08, 10, 12, 14, 16, 18; Cat. No. 5561R followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18, followed by T, followed by SM, SM1 or SM2; Cat. No. 9200P followed by 4B, 6, 9, 12 or 15; Cat. No. 9200R followed by 4B, 6, 9, 12 or 15; Cat. No. 9635P, followed by 09, 12 or 15; Cat. No. 9635R followed by 09, 12 or 15; Cat. No. 2363P followed by 01, 02, 06, 04, 05, 06, 09, 12 or 15, followed by 01, Cat. Nos. 2650P-08, 2650R-08.

Cat. No. 1320H, followed by 02 thru 12; Cat. No. 5560, followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18; Cat. No. 5561, followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18; Cat. No. 5561S, followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18, followed by T, followed by SM or SM1; Cat. No. 5561R, followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18, followed by 02, 04, 06, 08, 10, 12, 14, 16, 18; Cat. No. 5561R, followed by 02, 04, 06, 08, 10, 12, 14, 16 or 18, followed by T, followed by SM, SM1 or SM2; Cat. No. 9200P, followed by 4B, 6, 9, 12 or 15; Cat. No. 9200R, followed by 4B, 6, 9, 12 or 15; Cat. No. 9635R, followed by 09, 12 or 15; Cat. No. 2363P, followed by 01, 02, 06, 04, 05, 06, 09, 12 or 15, followed by A, followed by 01 or blank; Cat. No. 2363R, followed by 01, 02, 06, 04, 05, 06, 09, 12 or 15, followed by 01; Cat. Nos. 2650P-08, 2650R-08.

Connectors, Cat. No. 1253H, followed by 02 thru 16, 18, 20, 22, 24, 26, 28 or 30; Cat. Nos. 1254HA, 1254RA, 1254SA and 2114H, followed by 02 thru 15; Cat. No. 1254HB, followed by 10, 20, 30 or 40; Cat. No. 1255H, followed by 02 thru 10, 12, 20, 25 or 30; Cat. No. 1600H and 2220H, followed by 02 thru 20; Cat. No. 1600HB and 1600RMB, followed by 20, 30, 40 or 50; Cat. No. 1600SMB, followed by 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 40 or 50, followed by CR or blank; Cat. No. 1602H, followed by 08, 14, 20 or 30; Cat. Nos. 2004P and 2004S, followed by 10, 14, 16, 20, 24, 26, 30, 32, 34, 36, 40, 46, 50, 60, 70 or 80, followed by G; Cat. Nos. 2005P and 2005S, followed by 31 or 41; Cat. Nos. 2010 and 2011, followed by 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 50, 60, 68, 70, 80, 90, followed by G; Cat. Nos. 2065P and 2065S, followed by 10, 20, 30, 40, 50 or 52, followed by G; Cat. Nos. 2199RA and 2199SA, followed by 02 thru 50, followed by G; Cat. Nos. 2199RO and 2199R5, followed by 02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98 or 100, followed by G; Cat. Nos. 2199SB and 2200SB, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, followed by G; Cat. No. 2207SM, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80, followed by G; Cat. No. 2211, followed by DI or SM, followed by 02 thru 40, followed by G, T or SG; Cat. No. 2212111, followed by 02 thru 40, followed by G, followed by 1A, 1B, 1C, 2B, 2C, 3B, 3C or 4C; Cat. Nos. 2212R and 2212TB, followed by 02 thru 40, followed by G, SG or T; Cat. No. 2801SM, followed by 02 thru 05, followed by G; Cat. Nos. 5560A and 5561A, followed by 02 thru 12; Cat. No. 4409AS, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24 and 26; Cat. No. 5075ABMR, followed by 05, followed by SM or SM1; Cat. Nos. 5198H, followed by 02 thru 10; Cat. No. 5289, followed by R or S, followed by 02 thru 12; Cat. No. 5504F1RS, followed by 09, 15, 25 or 37, followed by S; Cat. Nos. 5513P-13W3, 5513S-13W3, 5514P-13W3, 5514S-13W3, 5515P-13W3 and 5515S-13W3; Cat. Nos. 5518R-24-1M15, 5518R-24-5M15, 5518S-24-5M15; Cat. No. 6604PB, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80, followed by G or T; Cat. Nos. 6803S and 6832S, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80, followed by G, SG or T; Cat. Nos. 6831S and 7801R, followed by 02 thru 40; Cat. No. 6833S, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80; Cat. No. 6850, followed by R, S or SM, followed by 02 thru 50, followed by G or T; Cat. No. 6852, followed by R1 or S1, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80, followed by G or T; Cat. No. 6853, followed by R1 or S1, followed by 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78 or 80; Cat No. 8982R, followed by 02 thru 04.

Marking: Company name or trademark



and catalog or model designation.

Last Updated on 2008-02-01

Questions? Notice of Disclaimer Page Top

Copyright © 2008 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 in the Online Certification Directory 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 © 2008 Underwriters Laboratories Inc.®"

www.DataSheet4U.com