



JUST MAKE ELECTRONICS CO.,LTD

捷仕美電子有限公司

Taiwan Office

高雄縣岡山鎮為隨里為隨西路85號

TEL: (07) 6223787

FAX: (07)6210385

China Office

廣東省東莞市長安鎮圳地村鎮前路

TEL: (0769)5315678/9

FAX: (0769)5315680

E-mail:jmt.ch@96326.com

China Office

廣東省東莞市大朗鎮犀牛陂工業區

TEL: (0769) 3125678

FAX: (0769)3122622

E-mail: jmt@dgjmt.com

<http://www.jmtdg.com>

SPECIFICATION FOR APPROVAL

規格承認書

| | |
|----------------|--|
| CUSTOMER 客戶 | |
|----------------|--|

| | |
|-----------|-------------------------|
| P/N 料號 | J1017BS-2 J1017BS-2A |
|-----------|-------------------------|

| | |
|-------------------|--|
| DESCRIPTION 品名 | |
|-------------------|--|

| | |
|---------------------|----|
| ISSUED REV. 發行版本 | 00 |
|---------------------|----|

| | |
|------------|------------|
| DATE 日期 | 2007-08-07 |
|------------|------------|

| | | | | |
|-------------------------|------------------------|-----------|----------|----------------------|
| CUSTOMER'S APPROVED: | CUSTOMER'S CHECKED: | APPROVED: | CHECKED: | PREPARED: 伍立群 |
|-------------------------|------------------------|-----------|----------|----------------------|

Please return to us one of "SPECIFICATION FOR APPROVAL" with your
approved signatures. (敬請承認後回簽!)

承認書

SPECIFICATION FOR APPROVAL SHEET

| <u>ITEM</u> | <u>INDEX</u> | <u>PAGE</u> |
|-------------|-------------------------|-------------|
| A | J1017BS-2 | |
| | J1017BS-2A | 1 |
| B | JP1017-(2 ~20) | 2 |
| C | Product performance | 3-5 |
| D | Certificate of material | 6-7 |
| E | UL-E127691 | 8 |
| F | CAS-LR97443-1 | 9 |
| G | TUV-19214-002 | 10 |
| H | SGS TEST REPORT | 11-16 |

1

2

3

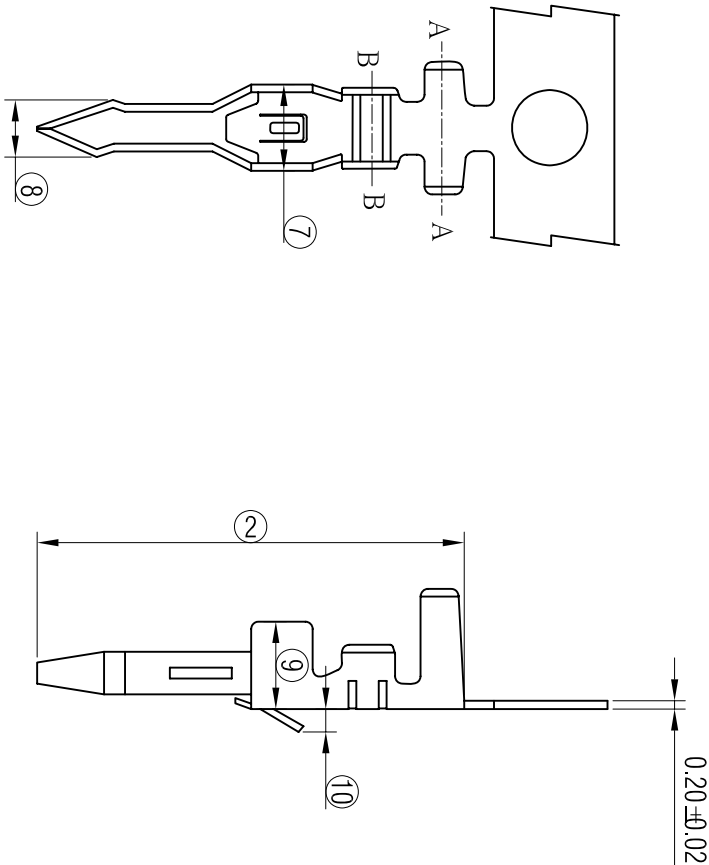
4

5

6

7

A.Terminal:



PART NO: J1017BS-2
J1017BS-2A
MATERIAL: BRASS(青銅) SH
THICKNESS: 0.20mm
PLATING: 40 μ"MIN
PACKING QUANTITY: 10000Pcs/Reel
(亮錫)

DIMENSION:(mm)

- 1:外觀:(不可氧化/變形)
2:9.20±0.30
3:2.30±0.30
4:1.50±0.30
5:2.50±0.25
6:1.30±0.25
7:1.50±0.20
8:0.90±0.15
9:1.70±0.15
10:0.40±0.15

Section A-A

Section B-B



東莞捷仕美電子有限公司
Just Make Electronics Co., Ltd.

| 料號 PART NO | J1017BS-2 J1017BS-2A | 品名 PART NAME | Pitch2.0Board-In(2A-亮沖) |
|---------------|-------------------------|-----------------|-------------------------|
|---------------|-------------------------|-----------------|-------------------------|

| 設計 DESIGNED | 伍立群 | 日期 DATE | 2007.06.23 | 圖號 Dwg. NO. | |
|----------------|-----|------------|------------|----------------|--|
|----------------|-----|------------|------------|----------------|--|

| 審核 CHECKED | | 日期 DATE | | 材質 MATERIAL | | 頁碼 PAGE | 1/1 |
|---------------|--|------------|--|----------------|--|------------|-----|
|---------------|--|------------|--|----------------|--|------------|-----|

| 核准 APPROVED | | 日期 DATE | | 比例 SCALE | | 散次 REVISION | A |
|----------------|--|------------|--|-------------|--|----------------|---|
|----------------|--|------------|--|-------------|--|----------------|---|

UNLESS OTHERWISE SPECIFIED.
DIMENSIONS ARE IN mm

TOLERANCE
± 0.10
± 0.25
± 0.36

ANGULAR
± 3°



1

2

3

4

5

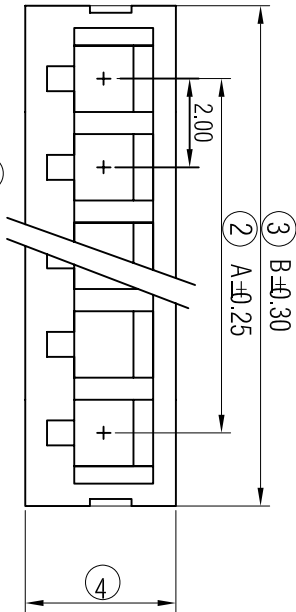
6

7

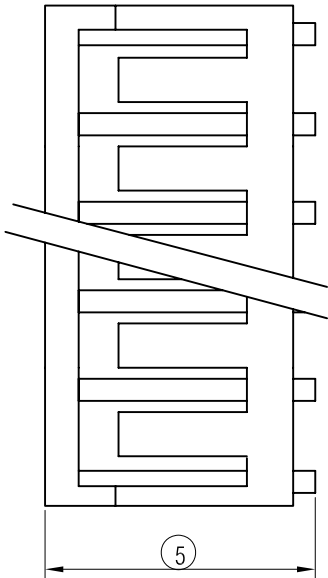
B:Housing

PART NO.:JP1017-2 TO 16

MATERIAL:NYLON 66 UL94V-0



②
③



| Circuits | Dimensions | |
|----------|------------|------|
| | A | B |
| 2 | 2.0 | 5.2 |
| 3 | 4.0 | 7.2 |
| 4 | 6.0 | 9.2 |
| 5 | 8.0 | 11.2 |
| 6 | 10.0 | 13.2 |
| 7 | 12.0 | 15.2 |
| 8 | 14.0 | 17.2 |
| 9 | 16.0 | 19.2 |
| 10 | 18.0 | 21.2 |
| 11 | 20.0 | 23.2 |
| 12 | 22.0 | 25.2 |
| 13 | 24.0 | 27.2 |
| 14 | 26.0 | 29.2 |
| 15 | 28.0 | 31.2 |
| 16 | 30.0 | 33.2 |

Ordering Information:

DIMENSION:(mm)

1:外觀(無破損,缺料,污點)

2:A±0.25

3:B±0.30

4:3.30±0.30

5:6.00±0.30

6:3.00±0.30



東莞捷仕美電子有限公司
Just Make Electronics Co., Ltd.

| 料號 PART NO. | JP1017-(2~16) | | UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE IN mm | | 品名 PART NAME | Pitch 2.0 Housing | |
|----------------|---------------|--|---|--|-----------------|-------------------|--|
|----------------|---------------|--|---|--|-----------------|-------------------|--|

| 設計 DESIGNED | 伍立群 | 日期 DATE | 2007.06.23 | 圖號 Dwg. NO. | | 材質 MATERIAL | | 頁碼 PAGE | 1/1 |
|----------------|-----|------------|------------|----------------|--|----------------|--|------------|-----|
|----------------|-----|------------|------------|----------------|--|----------------|--|------------|-----|

| 審核 CHECKED | | 日期 DATE | | ANGULAR | ± 3° | 比例 SCALE | | 散次 REVISION | B |
|---------------|--|------------|--|---------|------|-------------|--|----------------|---|
|---------------|--|------------|--|---------|------|-------------|--|----------------|---|

| 版本 REVISION | B | 設變編號 ECN NO. | | 設變內容 MODIFICATION | | 料號 PART NO. | | 品名 PART NAME | |
|----------------|---|-----------------|--|----------------------|--|----------------|--|-----------------|--|
|----------------|---|-----------------|--|----------------------|--|----------------|--|-----------------|--|

1

2

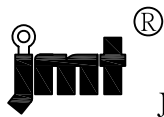
3

4

5

6

7



1017SERIES

Scope:

This specification covers the 2.0mm spacing WIRE TO BOARD CONNECTOR series.

Index:

PAGE

1. Product name and part number

2

2. Ratings and applicable wires.

2

3. Performance

3-1. Electrical performance

2

3-1-1. Insulation resistance

2

3-1-2. Dielectric strength

2

3-2. Mechanical performance

3-2-1. Crimping pull out force

3

3-2-2. Terminal insertion force

3

3-2-3. Terminal/Housing retention force

3

3-3. Environmental performance and others

3-3-12. Solderability

3

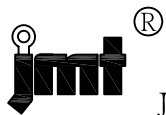
3-3-13. Resistance to soldering heat

3

4. Product shape dimension and materials

3

| REV | ECN NO. | REV | ECN NO. | DRAWING | CHECK | APPROVAL |
|-----|-----------|-----|---------|---------|-------|----------|
| 1 | NEW SPEC. | | | 李群裕 | | |
| | | | | | | |



1. PRODUCT NAME AND PART NUMBER

| Product Name | Part Number |
|--------------|----------------------|
| Terminal | J1017BS-2/J1017BS-2A |
| Housing | JP1017-(2~20) |

N: Refer to the drawing.

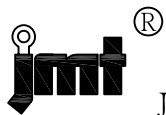
2. RATINGS AND APPLICABLE WIRES

| Item | Part Number |
|-----------------------------------|---|
| Current rating | 2.0A AC,DC |
| Voltage rating | 250V/AC,DC |
| Temperature range | -25°C TO +105°C (including temperature rise) |
| Applicable wire Insulation O.D | AWG #30~24 ø1.12~1.43mm |

3. PERFORMANCE

3-1. Electrical performance :

| Item | | Test Condition | Requirement |
|-------|-----------------------|--|----------------------------|
| 3-1-2 | Insulation Resistance | Mate connectors, apply 500V DC between adjacent terminal or ground. (Based upon JIS C5402 5.2/MIL-STD-202 Method 302 Cond.B) | 1000MΩ MIN |
| 3-1-3 | Dielectric Strength | Mate connectors, apply 800V AC for 1 minute between adjacent terminal or ground.(Based upon JIS C5402 5.1 /MIL-STD-202 Method 301) | No Breakdown and Flashover |



3-2. Mechanical Performance.

| Item | | Test Condition | Requirement | |
|-------|--|--|-------------|------------|
| 3-2-2 | Crimping Pull Out Force | Fix the crimped terminal, apply axial pull out force on the wire at the speed rate of 25 ± 3 mm/minute. (Based upon JIS C5402 6.8) | AWG #24 | 2.5kgf MIN |
| | | | AWG #26 | 2.0kgf MIN |
| | | | AWG #28 | 1.5kgf MIN |
| | | | AWG #30 | 1.0kgf MIN |
| 3-2-3 | Terminal Insertion Force | Insert the crimped terminal into the housing. | 1.5 kgf MAX | |
| 3-2-4 | Terminal/ Housing Retention Force | Apply axial pull out force at the speed rate of 25 ± 3 mm/minute on the terminal assembled in the housing | 1.0 kgf MIN | |



| 合 金 種 類 | | 丹銅&黃銅合金 | | | | | | | | 含錫黃銅 | | | |
|--|------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------------------|---|--|
| | | C2100 | C2200 | C2300 | C2400 | C260S | C2600 | C2680 | C2720 | C2801 | C2801S | C4250 | C425M |
| 化 性 成 份 (%) | | 銅:94.0~96.0 鋅:餘量 | 銅:89.0~91.0 鋅:餘量 | 銅:84.0~86.0 鋅:餘量 | 銅:78.5~81.5 鋅:餘量 | 銅:70.5~73.5 鋅:餘量 | 銅:68.5~71.5 鋅:餘量 | 銅:64.0~68.0 鋅:餘量 | 銅:62.0~64.0 鋅:餘量 | 銅:59.0~62.0 鋅:餘量 | 銅:59.0~62.0 錫:0.3~0.6 鋅:餘量 | 銅:87~90. 錫:1.5~3.0 鋅:餘量. 磷 ≤0.35 | 銅:86~88 錫:2.5~4.0 鋅:餘量. 磷 ≤0.35 |
| 比 重 (gm/cm ³) | | 8.86 | 8.80 | 8.75 | 8.67 | 8.53 | 8.53 | 8.50 | 8.45 | 8.39 | 8.39 | 8.78 | 8.78 |
| 熱膨脹係數 (10 ⁻⁶ /°C) | | 18.1 | 18.4 | 18.7 | 19.1 | 19.9 | 19.9 | 20.3 | 20.6 | 20.8 | 20.8 | 18.5 | 18.5 |
| 熱傳導係數 (Cal/ cm ² /cm/sec/°C) | | 0.56 | 0.45 | 0.38 | 0.33 | 0.29 | 0.29 | 0.29 | 0.30 | 0.29 | 0.29 | 0.29 | 0.25 |
| 導電率 (%IACS, 20°C) | | ≥56 | ≥44 | ≥37 | ≥32 | ≥25 | ≥25 | ≥24 | ≥26 | ≥23 | ≥23 | ≥26 | ≥24 |
| 抗張強度 (N/mm ²) | 燒鈍軟化 | ≥205 | ≥225 | ≥245 | ≥255 | ≥295 | ≥295 | ≥295 | ≥295 | ≥320 | ≥320 | 295~380 | 295~380 |
| | 1/4H | 250~305 | 275~335 | 295~365 | 295~375 | 330~415 | 330~415 | 330~415 | 330~415 | 350~440 | 350~440 | 340~405 | 340~405 |
| | 1/2H | 270~345 | 295~365 | 310~385 | 320~405 | 370~440 | 370~440 | 370~440 | 370~440 | 410~490 | 410~490 | 390~475 | 390~475 |
| | 3/4H | -- | -- | -- | -- | 410~470 | 410~470 | 410~470 | 410~470 | -- | -- | 430~510 | 430~510 |
| | H | ≥280 | ≥320 | ≥340 | ≥375 | 430~510 | 430~510 | 430~510 | 430~510 | ≥450 | ≥450 | 480~565 | 480~565 |
| | EH | -- | -- | -- | -- | 510~610 | 510~610 | 510~610 | 510~610 | -- | -- | 525~605 | 525~605 |
| | SH | -- | -- | -- | -- | 565~630 | 565~630 | 565~630 | 565~630 | -- | -- | 580~650 | 580~650 |
| 伸長率 (%) | ESH | -- | -- | -- | -- | 610~725 | 610~725 | 610~725 | 610~725 | -- | -- | ≥635 | ≥635 |
| | 燒鈍軟化 | ≥33 | ≥35 | ≥40 | ≥44 | ≥45 | ≥45 | ≥45 | ≥45 | ≥35 | ≥35 | ≥35 | ≥40 |
| | 1/4H | ≥23 | ≥25 | ≥28 | ≥30 | ≥40 | ≥40 | ≥40 | ≥40 | ≥25 | ≥25 | ≥25 | ≥30 |
| | 1/2H | ≥18 | ≥20 | ≥23 | ≥25 | ≥30 | ≥30 | ≥30 | ≥30 | ≥15 | ≥15 | ≥15 | ≥20 |
| | 3/4H | -- | -- | -- | -- | ≥20 | ≥20 | ≥20 | ≥20 | -- | -- | ≥10 | >15 |
| | H | -- | -- | -- | -- | ≥14 | ≥14 | ≥14 | ≥14 | -- | -- | ≥5 | >10 |
| | EH | -- | -- | -- | -- | ≥8 | ≥8 | ≥8 | ≥8 | -- | -- | -- | -- |
| | SH | -- | -- | -- | -- | ≥5 | ≥5 | ≥5 | ≥5 | -- | -- | -- | -- |
| 硬 度 (Hv) | ESH | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | 燒鈍軟化 | ≤65 | ≤70 | ≤70 | ≤80 | ≤90 | ≤90 | ≤90 | ≤90 | -- | -- | 50~100 | 50~100 |
| | 1/4H | 65~80 | 70~95 | 70~95 | 75~105 | 90~105 | 90~105 | 90~105 | 90~105 | 85~105 | 85~105 | 80~130 | 80~130 |
| | 1/2H | 80~100 | 95~120 | 95~120 | 100~130 | 105~130 | 105~130 | 105~130 | 105~130 | 105~130 | 105~130 | 110~160 | 110~160 |
| | 3/4H | -- | -- | -- | -- | 130~145 | 130~145 | 130~145 | 130~145 | -- | -- | 120~170 | 120~170 |
| | H | ≥100 | ≥120 | ≥120 | ≥125 | 145~160 | 145~160 | 145~160 | 145~160 | ≥130 | ≥130 | 140~180 | 140~180 |
| | EH | -- | -- | -- | -- | 160~175 | 160~175 | 160~175 | 160~175 | -- | -- | 150~190. | 150~190. |
| 軟化溫度.(°C) | SH | -- | -- | -- | -- | 175~190 | 175~190 | 175~190 | 175~190 | -- | -- | 165~205 | 165~205 |
| | ESH | -- | -- | -- | -- | 190~210 | 190~210 | 190~210 | 190~210 | -- | -- | ≥180 | ≥180 |
| 彈性係數 (KN/mm ²) | | 118 | 118 | 118 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 112 | 112 |



QMFZ2 Component - Plastics

Friday, October 24, 2003

E44716

RHODIA ENGINEERING PLASTICS

QUARTIER BELLE-ETOILE AVE RAMBOZ BOITE POSTALE 64 69192 ST FONS CEDEX FRANCE

Material Designation: **B 50H1(r1)**

Product Description: Polyamide 66/6 (PA66/6), designated "Technyl" furnished as pellets.

| Color | Min. Thick. (mm) | Flame Class | HWI | HAI | RTI Elec | RTI Imp | RTI Str | IEC GWIT | IEC GWFI |
|---------------|------------------|-------------|----------------|-----|----------------|---------|------------------|----------|----------|
| ALL | 0.38 | V-0 | 4 | 0 | 120 | - | - | - | - |
| | 0.75 | V-0 | 4 | 0 | 120 | 90 | 95 | - | - |
| BK | 1.0 | V-0, 5VB | 4 | 0 | 120 | 90 | 95 | - | - |
| | 1.5 | V-0 | 4 | 0 | 120 | 90 | 95 | - | - |
| | 3.0 | V-0 | 3 | 0 | 120 | 90 | 95 | - | - |
| CTI: 0 | | | HVTR: 0 | | D495: 6 | | IEC BP: - | | |

(r1) Virgin and regrind up to 50% by weight incl. have the same basic material characteristics, except for the 5VB rating.

Report Date: 10/21/1993

Underwriters Laboratories Inc®

585521001

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.

85 WEISWEI W RD

KANGSHAN

KAOHSIUNG HSIEN, TAIWAN

Connectors. Model JM2416 followed by 2 thru 24, may be followed by R; Model JP2416 followed by 2 thru 24; Model JM24188, JP24188 followed by 2 thru 15; Model JP3301 followed by 2 thru 40; Model JP3304 followed by 2 thru 25.

Model J1012BS.

Models JP2015, -2413 followed by 2 thru 15; Model JM2413 followed by 2 thru 15, may be followed by S.

Connectors. Model Nos. JP2030, JP2130 followed by 2 thru 6, 9, or 12; Model Nos. JP2030, JP2130 followed by 2 thru 4, 6, 9 or 12 followed by A or B; Model Nos. JP2030, JP2130 followed by 1 thru 4, 6, 9 or 12 followed by K; Model Nos. JP1631, JP1731 followed by 3, 4, 6 or 9; Model Nos. JP1631, JP1731 followed by 2 thru 4, 6, or 9, followed by K; Model Nos. JP1661, JP1761 followed by 1 thru 4 or 6, may be followed by A; Model Nos. JP1661, JP1761 followed by 2 thru 4 or 6, followed by K.

Low voltage connector. Model JP2017 followed by 2 thru 15.

Socket connectors. Series JP1017, -1019, -1020, -1120, -1130, -1030, -1135, -1138, -1158, -1058, -11635-4, -2120, -2020, -2411, -2418, -2422 -3101, -3102 -3175-20, -3201, -3304, -3966-6; Pin Plug Series JM1135, -1138, -2411, -2418, -2422 -2541, -2542 -3175-20.

Series JP24118, -24181, -24182 -24186, -24228; Pin plug Series JM24118, -24181, -24182 -24186, -24228.

Terminals. Cat. Nos. J1010BS, J1018BS, J10181PS-2, J1041BS, J1042BS, J1051BS, J1110BS, J1119PS, J11202BS, J1136BS, J1141BS, J1151BS, J1161BS, J1710BS, J1711BS, J1736BS, J1841BS, J2121BS, J2133BS, J2134BS, J2143BS, JR2121BS, JS2122BS.

Connectors. Models JP1020V2, JP1120V2 followed by 2 or 4. Models JP2422V2, JM2422V2 followed by 2 thru 20. Models JP2020V2, JP2120V2 followed by 1, 2 3, 4, 6, 9, 12 or 15. Model JP3960V2 followed by 6. Model JM3960V2 followed by 6 or 12. Models JP1135V2, JM1135V2, JP1138V2, JM1138V2 followed by 1 thru 6. Models JP11635V2, JM11635V2 followed by 2 or 4. Models JP2411V2, JM2411V2 followed by 2 thru 20. Models JP2016V2, JP2416V2 followed by 2 4, 6, 8, 10, 12 14, 16, 18, 20, 22 or 24. Models JP24182V2, JM24182V2 followed by 2 thru 20.

Low voltage connectors. Model JP24125 followed by 2 thru 15; Model JM24125 followed by 2 thru 15, may be followed by R.

Connectors. Models JP24189, JM24189, followed by 02 thru 15.

Low voltage connector. Model JP125FFC, followed by 3 thru 40, may be followed by R.

Uninsulated connectors , Cat. Nos. J1011BS-2, J1011BS-2A, J1011PS-2, J1011PS-2A, J1012BS-2, J1012BS-2A, J1012PS-2, J1012PS-2A, J11186BS-2, J11186BS-2A, J11186PS-2, J11186PS-2A, J11188BS-2, J11188BS-2A, J11188PS-2, J11188PS-2A, J11189BS-2, J11189BS-2A, J11189PS-2, J11189PS-2A, J10181BS-2, J10181BS-2A, J10181PS-2, J10181PS-2A, J10182BS-2, J10182BS-2A, J10182PS-2, J10182PS-2A, J10185BS-2, J10185BS-2A, J10185PS-2, J10185PS-2A, J10186BS-2, J10186BS-2A, J10186PS-2, J10186PS-2A, J10188BS-2, J10188BS-2A, J10188PS-2, J10188PS-2A, J10180BS-2, J10180BS-2A, J10180PS-2, J10180PS-2A, J10183BS-2, J10183BS-2A, J10183PS-2, J10183PS-2A, J10184BS-2, J10184BS-2A, J10184PS-2, J10184PS-2A, J10187BS-2, J10187BS-2A, J10187PS-2 and J10187PS-2A.

Connectors , Cat. Nos. JM6758, JP0303-7A, JP0303-15A, JP6758-15, JP0302-15A; Cat. Nos. JM2350-2 and JP2350-2; Cat. No. JM2351, followed by 2A, 2B, 2C or 3 thru 5, followed by R or blank; Cat. No. JP2351, followed by 2A, 2B, 2C or 3 thru 5; Cat. No. JP2540, followed by 2 thru 12; Cat. No. JP2500, followed by 2 thru 6.

Connectors , Cat. No. JM1000, followed by 02 thru 16, followed by R or blank; Cat. No. JP1000, followed by 02 thru 16; Cat. Nos. JM1121-4, JP0301-4A, JP0301-4B, JP0301-4C; Cat. No. JM24150, followed by 2 thru 15, followed by R or blank; Cat. No. JP24150, followed by 2 thru 15.



Marking: Company name or trademark or tradename "JMT" or file number E127691 and model, catalog or series designation on device or carton.

TÜV Product Service GmbH
Zertifizierungsstelle
Hillerstraße 31
D-8000 München 2

Telefon 089/50084-210
Telefax 089/50084-230

TÜV
PRODUCT SERVICE

Zeichen-
Genehmigungs-Ausweis
Test Mark Award Certificate

Nr.
No.

93 12 19214 002

Zeichen des Antragstellers
Reference of Applicant

Antragsdatum
Date of Application
Oct. 1993

Aktenzeichen
File Reference
1152

Prüfbericht-Nr.
Test Report No.
02/290-3.001/01-2

Just Make Terminal & Machine Co., Ltd.

Die Firma

The firm styled
in / of

No. 85, Welswei W. Rd., Kangshan Kaohsiung Hsien, Taiwan

ist berechtigt, das unten genannte Erzeugnis mit dem abgebildeten Prüfzeichen der
TÜV Product Service GmbH zu kennzeichnen.

Bitte beachten Sie auch die unseitigen Hinweise.

is authorized to provide the product mentioned below with the approval mark of
TÜV Product Service GmbH as shown on the right

Please also pay attention to the hints stated overleaf
same as applicant

TÜV
PRODUCT SERVICE

Dauer
geprüft

Fertigungsstätte

Manufacturing plant

Gepfult nach

tested in accordance with

DIN VDE 0627 06.86
DIN VDE 0110 T1 01.89
DIN VDE 0110 T2 01.89

Jahresgebührenbeiträge
Annuities

Beschreibung der Geräte
Description of equipment

Connectors

Types:

001 JP3175/JM3175, JP3201/JM2541
JP2422/JM2422, JP2030/JP2130
JP1058/JP1158
250 V AC/DC

Rated voltage:

002 JP24228/JM24228, JP1138/JM1138, JP2416/JM2416

Rated current:

JP1135/JM1135, JP1130/JP1030, JP2411/JM2411

Insulation class:

JP3960/JP3966, JP2020/JP2120, JP1020/1120

Temperature:

250 V AC/DC

Insertion cycles:

003 JP1017, JP1019, JP11635/JM11635

Remark:

JP24181/JM24181, JP2418/JM2418
JP24186/JM24186, JP24182/JM24182
100 V AC/DC

as attached page

B

-105°C

50 (B)

Protection against contacts with live parts
has to be guaranteed by installation.

10. Dezember 1993

München, den / Munich, dated

Zertifizierungsstelle / Certification Body

S. Hüner
S. MUSCH



Prüflabor / Testing Laboratory

F. Albarus



PROFILE OF CERTIFICATION REPORTS

178 Rexdale Blvd, Rexdale (Tolonic), Ontario M9W 1R3

NUMBR P97443x0000

FILE NO: LR 97443

SUBMITTOR

Just Make Terminal & Machine Co.
No 85 Weiswel West Rd.
Kangshan Kaohging
Hsien, Taiwan
Attention: Mr. c.c. Lin
President

Page No: CRP 1 OF 1
Date: May 14, 1993
Replaces: February 7, 1992

FACTORY

NO 85 Weiswel West Rd.
Kangshan Kaohsing
Hsien, Taiwan

INSPECTION OFFICE

Taiwan

FILE NO

LR 97443

REPORT NO-APPL. NO FACTORY NOS

SUBJECT

- 1
October 28, 1991 - Special use connectors, Cat Nos JP1017, JP1020, JP1120, JM1135, JP1135, JM1138, JP1138, JP1631, JP1731, JP1661, JP1761, JP2020, JP2120, JM2411, JM2418, JM2422, JP2422, JM2541, JM2542, JM3175, JP3175, JP3966, JP11202, JM11635, JM24181, JP24181, JM24182, JP24182, JM24186, JP24186, JM24228, JP24228, JM24511.
- 2
January 6, 1992 - Quick connect terminals, uninsulated female connectors, Cat Nos J1741BS-0, J1741BS-2, J1752BS-0, J1752BS-2, J1753BS-0, J1753BS-2, J2362BS-0 and J2362BS-2.
- 3
February 7, 1992 - Update to Report LR 97443-1 to include special use connectors. Cat nos JP1019, JP1030, JP1058, JP1130, JP1158, JP2030, JP2130, JP2411, JP2418, JP3301, JP11635, JM24118, JP24118.
- 4
May 14, 1993 - Wire connectors, uninsulated ring terminals, Cat nos J1441BS, J1445BS and J1473BS.
- 5
July 18, 1994 - Update to Report 97443-1 to include special-use connectors Cat Nos JP2016, JP2416, JP3960.
- 6
June 20, 1994 - Quick connect terminals, uninsulated female connectors, Cat Nos J1730BS, J1732BS, J1735BS, J1751BS, J1764BS, and J2363BS; H1663BL and J16312BS. Wire connectors, special use, uninsulated PC board type, Cat Nos J1012BS, J10183Bs and J1842BS.

Test Report

No. 2084198/EC

Date : Dec 14 2006

Page 1 of 6

JUST MAKE ELECTRONICS CO.,LTD
XI NIU PI INDUSTRIAL ESTATE,
DA LANG TOWN, DONGGUAN

Reported results are referred to test report number 2083191/EC.

Report on the submitted sample said to be HOUSING.

SGS Job No. : 1040519
SGS Ref. No. : SZ10158994-4.1
Lot No. : 061102
Main Substance : PA66
Material : PA66
Model No. : JP1017, JP1019, JP1120, JP1020, JP1130, JP1030, JP1158, JP1058, JP0301, JP0302, JP2017, JP1138, JP1135, JP1000, JP2000, JP11635, JP2130, JP2030, JP2120, JP2020, JP2413, JP2422, JP24228, JP24181, JP24118, JP24182, JP24188, JP24189, JP24125, JP24150, JP23125, JP2000, JP2318, JP24118, JP2418, JP2350, JP2351, JP3960, JP2540, JP2316, JP2416, JP2016, JP1732A, JP1741H, JP1741A, JP1752A, JP1764A, JP1661, JP1761, JP2015, JP2001, JP1121, JP2500, JP2140, JP5127, JP3301
Supplier : DUPONT / BASF
Sample Receiving Date : NOV 24 2006
Testing Period : NOV 24 - 30 2006

Test Requested : (1-5) In accordance with RoHS Directive 2002/95/EC, and its amendment directives.
(6) To determine Polynuclear Aromatic Hydrocarbons (PAHs).
(7) To determine the phthalate contents.
(8) Determination of TBBP-A of the submitted sample.
(9) To determine of Chlorinated Paraffin (C10~C13) of the submitted sample.



Test Report

No. 2084198/EC

Date : Dec 14 2006

Page 2 of 6

Test Method : (1-5) With reference to IEC 62321 (Ed. 1) 111/54/CDV. Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products
(1) Determination of Lead & Cadmium by ICP/ AAS (Clause 12/ 13/ 14)
(2) Determination of Mercury by ICP/ CV-AAS (Clause 11)
(3) Determination of Hexavalent Chromium by Colorimetric Method (Clause 9/ 10)
(4) The presence of Hexavalent Chromium on the metal sample. Analysis was performed by spot-test/ boiling-water-extraction. (Clause 8)
(5) Determination of PBB and PBDE by GC/MS (Clause 7)
(6) With reference to EPA Method 8270D. Analysis was performed by GC/MS.
(7) With reference to ASTM Method Designation D3421-75. Analysis was performed by Gas Chromatography / Mass Spectrometry.
(8) With reference to SGS in-house method. Analysis was performed by GC/MS.
(9) With reference to SGS in-house method. Analysis was performed by GC/ECD.

Test Results : Please refer to next page.

Conclusion : 1-5) Based on the performed tests on submitted sample, the results comply with the RoHS Directive 2002/95/EC and its subsequent amendments

Signed for and on behalf of
SGS Hong Kong Ltd



Ho Ka Ting, Family
Laboratory Executive



Test Report

No. 2084198/EC

Date : Dec 14 2006

Page 3 of 6

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

1-5)

| | <u>1</u> | <u>MDL</u> | <u>Limit</u> |
|--|-------------|------------|--------------|
| Cadmium(Cd) | n.d. | 2 | 100 |
| Lead (Pb) | n.d. | 2 (5*) | 1000 |
| Mercury (Hg) | n.d. | 2 | 1000 |
| Hexavalent Chromium (CrVI) by colorimetric method | n.d. | 2 | 1000 |
| Hexavalent Chromium (CrVI) by spot-test/ boiling-water-extraction | -- | | # |
| Sum of PBBs | n.d. | - | 1000 |
| Monobromobiphenyl | n.d. | 5 | |
| Dibromobiphenyl | n.d. | 5 | |
| Tribromobiphenyl | n.d. | 5 | |
| Tetrabromobiphenyl | n.d. | 5 | |
| Hexabromobiphenyl | n.d. | 5 | |
| Pentabromobiphenyl | n.d. | 5 | |
| Heptabromobiphenyl | n.d. | 5 | |
| Octabromobiphenyl | n.d. | 5 | |
| Nonabromobiphenyl | n.d. | 5 | |
| Decabromobiphenyl | n.d. | 5 | |
| Sum of PBDEs (Note 4) | n.d. | - | 1000 |
| Monobromodiphenyl ether | n.d. | 5 | |
| Dibromodiphenyl ether | n.d. | 5 | |
| Tribromodiphenyl ether | n.d. | 5 | |
| Tetrabromodiphenyl ether | n.d. | 5 | |
| Pentabromodiphenyl ether | n.d. | 5 | |
| Hexabromodiphenyl ether | n.d. | 5 | |
| Heptabromodiphenyl ether | n.d. | 5 | |
| Octabromodiphenyl ether | n.d. | 5 | |
| Nonabromodiphenyl ether | n.d. | 5 | |
| Decabromodiphenyl ether | n.d. | 5 | |
| Sum of PBDEs (Mono to Deca) | n.d. | - | |

Note :

- (1) mg/kg = ppm; 0.1% = 1000 ppm
- (2) MDL = Method Detection Limit
- (3) n.d. = Not Detected (Less than MDL)
- (4) Sum of Mono to NonaBDE & according to 2005/717/EC DecaBDE is exempt.
- (5) **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.
- (6) # = Positive indicates the presence of Hexavalent Chromium on the tested areas and result be regarded as not comply with RoHS requirement.
Negative indicates the absence of CrVI on the tested areas and result be regarded as comply with RoHS requirement.
- (7) * = MDL for metal sample
- (8) - = Not Regulated
- (9) -- = Not Conducted



Test Report

No. 2084198/EC

Date : Dec 14 2006

Page 4 of 6

6)

| <u>Compounds</u> | <u>CAS Number</u> | <u>Sample 1 (mg/kg)</u> | <u>Quantitation Limit (QL)</u> <u>(mg/kg)</u> |
|------------------------------|-------------------|-------------------------|--|
| Naphthalene (NAP) | 91-20-3 | n.d. | 0.1 |
| Acenaphthylene (ANY) | 208-96-8 | n.d. | 0.1 |
| Acenaphthene (ANA) | 83-32-9 | n.d. | 0.1 |
| Fluorene (FLU) | 86-73-7 | n.d. | 0.1 |
| Phenanthrene (PHE) | 85-01-8 | n.d. | 0.1 |
| Anthracene (ANT) | 120-12-7 | n.d. | 0.1 |
| Fluoranthene (FLT) | 206-44-0 | n.d. | 0.1 |
| Pyrene (PYR) | 129-00-0 | n.d. | 0.1 |
| Benz(a)anthracene (BaA) | 56-55-3 | n.d. | 0.1 |
| Chrysene (CHR) | 218-01-9 | n.d. | 0.1 |
| Benzo(b)fluoranthene (BbF) | 205-99-2 | n.d. | 0.1 |
| Benzo(k)fluoranthene (BkF) | 207-08-9 | n.d. | 0.1 |
| Benzo(a)pyrene (BaP) | 50-32-8 | n.d. | 0.1 |
| Indeno(1,2,3-cd)pyrene (IPY) | 193-39-5 | n.d. | 0.1 |
| Dibenz(a,h)anthracene (DBA) | 53-70-3 | n.d. | 0.1 |
| Benzo(g,h,i)perylene (BPE) | 191-24-2 | n.d. | 0.1 |
| Total of above PAHs | | n.d. | |

Note :

- (1) mg/kg = ppm; 0.1% = 1000 ppm
- (2) n.d. = Not Detected (Less than QL)



Test Report

No. 2084198/EC

Date : Dec 14 2006

Page 5 of 6

7)

| <u>Phthalate</u> | <u>1</u> | <u>MDL</u> |
|-------------------------------------|----------|------------|
| Dimethyl Phthalate (DMP) | n.d. | 0.005% |
| Diethyl Phthalate (DEP) | n.d. | 0.005% |
| Dibutyl Phthalate (DBP) | n.d. | 0.003% |
| Benzylbutyl Phthalate (BBP) | n.d. | 0.003% |
| Bis-(2-ethylhexyl) Phthalate (DEHP) | n.d. | 0.003% |
| Diisononyl Phthalate (DINP) | n.d. | 0.01% |
| Di-n-octyl Phthalate (DNOP) | n.d. | 0.003% |
| Diisodecyl Phthalate (DIDP) | n.d. | 0.01% |
| Diiso butyl Phthalate (DIBP) | n.d. | 0.01% |
| Dinonyl Phthalate (DNP) | n.d. | 0.01% |
| Diisooctyl Phthalate (DIOP) | n.d. | 0.01% |
| Dipropyl Phthalate (DPrP) | n.d. | 0.005% |
| Dicyclohexyl Phthalate (DCHP) | n.d. | 0.005% |
| Dipentyl Phthalate (DPP) | n.d. | 0.005% |
| Dibenzyl Phthalate | n.d. | 0.005% |
| Diphenyl Phthalate | n.d. | 0.005% |

Note :

- (1) mg/kg = ppm; 0.1% = 1000 ppm
- (2) MDL = Method Detection Limit
- (3) n.d. = Not Detected (Less than MDL)

8)

| <u>Compound</u> | <u>CAS No.</u> | <u>1</u> | <u>MDL</u> |
|--------------------------------|----------------|----------|------------|
| Tetrabromobisphenol-A (TBBP-A) | 79-94-7 | n.d. | 5 ppm |

Note :

- (1) mg/kg = ppm; 0.1% = 1000 ppm
- (2) MDL = Method Detection Limit
- (3) n.d. = Not Detected (Less than MDL)

9)

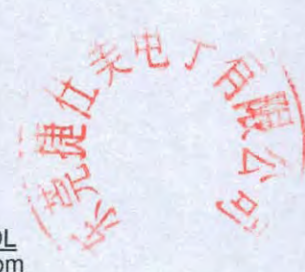
| <u>Test Item</u> | <u>1</u> | <u>MDL</u> |
|----------------------|----------|------------|
| Chlorinated Paraffin | n.d. | 50 ppm |

Note :

- (4) mg/kg = ppm; 0.1% = 1000 ppm
- (5) MDL = Method Detection Limit
- (6) n.d. = Not Detected (Less than MDL)

Sample Description :

1. White Plastic Pellet



Test Report

No. 2084198/EC

Date : Dec 14 2006

Page 6 of 6

Sample photo :



SGS authenticate the photo on original report only

End of Report

Test Report

No. 2082320/EC

Date : Nov 30 2006

Page 1 of 4

JUST MAKE ELECTRONICS CO., LTD
XI NIU PI INDUSTRIAL ESTATE,
DA LANG TOWN, DONGGUAN

Report on the submitted sample said to be TERMINAL.

SGS Job No. : 1040466
SGS Ref. No. : SZ10158994-4.2
Terminal Lot No. :

J1011、J1012、J1017、J1018、J1019、J10181、J10182、J10183、
J10185、J10186、J11186、J10187、J10188、J11188、J10189、J11
189、J1000、J1051、J1431、J14311、J14312、J1432、J1441、J14
45、J1543、J1535、J14451、J14452、J1473、J1425、J1439、J143
92、J1456、J15351、J1660、J1661、J1612、J1631、J1730、J1732
、J1735、J1740、J1741、J1749、J1751、J1752、J1753、J1764、J1
130、J1030、J1158、J1058、J1020、J0301、J1120、J11202、J113
5、J1138、J11636、J1119、J2000、J2016、J2416、J2020、J2120、
J20201、J21201、J24111、J24221、J24228、J2350、J2351、J2312
5、J24125、J24150、J24181、J24182、J24188、J24189、J6425、J
2413、J2133、J2143、J24118、J2540、J2015、J2017、J2027、J23
18、J16312、J2030、J2130、10082、J2316、J2426、J2436、J2025
、J2347、J2362、J2363、J2418、J2423、J742411、J742462、C268
0、J24231、J3301、J5127

Lot No. : 061101
Main Substance : Cu
Material : Cu
Buyer : 惠州三星
Supplier : 臺灣第一伸銅
Sample Receiving Date : NOV 24 2006
Testing Period : NOV 24 - 30 2006



H 14304516

Test Report

No. 2082320/EC

Date : Nov 30 2006

Page 2 of 4

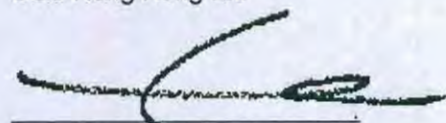
Test Requested : (1) To determine the Cadmium, Lead, Mercury on the submitted metal sample.
(2) Determination of the presence of Hexavalent Chromium Cr(VI) in the submitted metal samples.

Test Method : (1) With reference to IEC 62321 (Ed. 1) 111/54/CDV for Cadmium, Lead, Mercury content of metal sample.
Analysis was performed by ICP/ AAS.
(2) With reference to IEC 62321 (Ed. 1) 111/54/CDV – Section 8 for the presence of Hexavalent Chromium on the metal sample.
Analysis was performed by spot-test/ boiling-water-extraction.

Test Results : Please refer to next page.

Conclusion : When tested as specified, the results shown on the report do not exceed the limit in Operation Standard OQA-2049 of HUIZHOU SAMSUNG.

Signed for and on behalf of
SGS Hong Kong Ltd



Wan Chi Wai, Leo
Technical Manager



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

1-2)

| | <u>1</u> | <u>MDL</u> | <u>Limit</u> |
|--|----------------------|------------|--------------|
| Cadmium(Cd) | n.d. | 2 | 80 |
| Lead (Pb) | 29 | 5 | 800 |
| Mercury (Hg) | n.d. | 2 | 800 |
| Hexavalent Chromium (CrVI) by spot-test/ boiling-water-extraction | Negative (Note 4) | | # |

Note :

- (1) mg/kg = ppm; 0.1% = 1000 ppm
- (2) MDL = Method Detection Limit
- (3) n.d. = Not Detected (Less than MDL)
- (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:

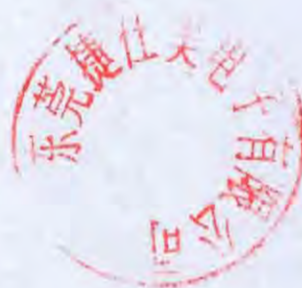
Negative = Absence of CrVI coating

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.

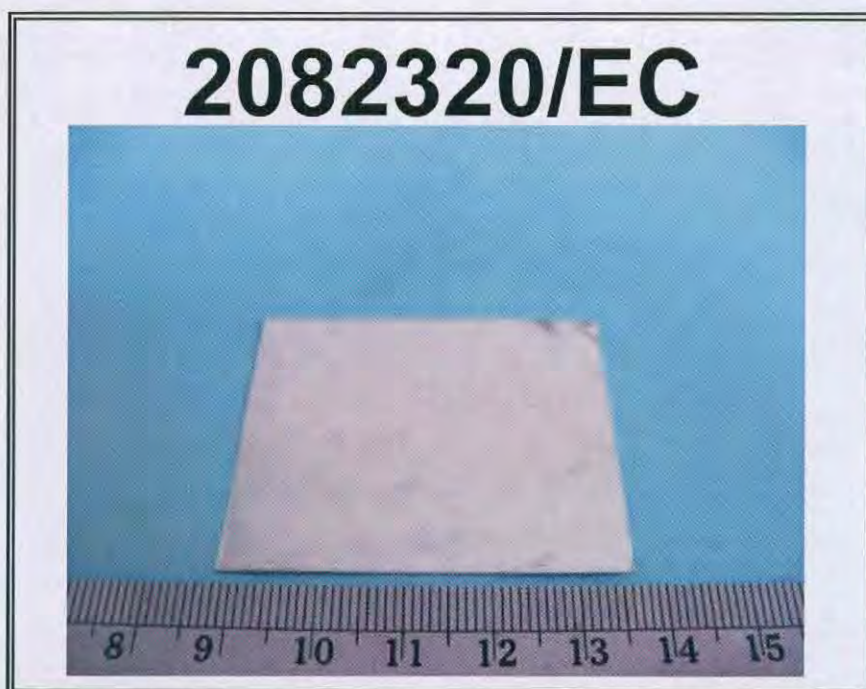
- (5) # = Positive indicates the presence of Hexavalent Chromium on the tested areas and result be regarded as conflict with RoHS requirement.
Negative indicates the absence of CrVI on the tested areas and result be regarded as no conflict with RoHS requirement.

Sample Description :

1. Silvery Metal



Sample photo :



SGS authenticate the photo on original report only

End of Report



Packing standard

| | | | | | | | | | |
|-------|--------------|----|------------------|------|------------|------|---|------|-----|
| Title | J1017BS-2/2A | No | J1017BS-2/2A-PK1 | Date | 2006.08.17 | Rev. | A | Page | 1/1 |
|-------|--------------|----|------------------|------|------------|------|---|------|-----|

Description :

| PART No. | Reel | | Carton | | Weight(Kg) | |
|------------|----------------|------------|--------------------------|-------------------------|------------|------|
| | Dimension (mm) | Q'TY (PCS) | Dimension (mm) | Q'TY (PCS) | N.W | G.W |
| J1017BS-2 | | | | | | |
| J1017BS-2A | ø600.0*26.0 | 10000 | 620.00*200.00 *620.00 | 10000*7(Reel) ≈70000 | 4.29 | 8.41 |

a. b.

