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**Sealed 0.50/1.0 Connector (防水 0.50/1.0 コネクタ)**

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**1. Introduction****1.1. Purpose**

Testing was performed on the Sealed 0.50/1.0 Connector to determine if it meets the requirements of TE specification, 108-78518.

**1.2. Scope**

This report covers the results of electrical, mechanical and environmental performance requirements testing of the Sealed 0.50/1.0 Connector.

The qualification testing was performed between 01 Jul 2008 and 14 Apr 2009.

**1.3 Conclusion**

The Sealed 0.50/1.0 Connector meets the performance requirements of Product Specification, 108-78518.

**1.4 Product Description**

This connector has been designed for use of automotive wire-to-board connector.

**1.5 Test Samples**

Samples were taken randomly from current production. The following samples were used (Fig. 1).

**1. はじめに****1.1 目的**

本試験は、防水 0.50/1.0 コネクタの製品規格 108-78518 に規定された性能必要条件に合致しているかを確認するために行われた。

**1.2 適用範囲**

本報告書は、防水 0.50/1.0 コネクタの電氣的、機械的および環境的性能必要条件について行った試験内容を記述している。

本製品認定試験は、2008 年 7 月 1 日から 2009 年 4 月 14 日までに行われた。

**1.3. 結論**

防水 0.50/1.0 コネクタは該当製品規格 108-78518 の性能必要条件に合致していた。

**1.4. 製品の説明**

自動車産業向けに開発した電線対基板用のコネクタである。

**1.5. 試料**

試料は現行の生産システムから無作為抽出法によって取り出された。以下の試料が試験に使用された (Fig. 1)

| Part No.* <sup>1</sup><br>型 番* <sup>1</sup> | Description<br>品 名                                                             |
|---------------------------------------------|--------------------------------------------------------------------------------|
| 1939921                                     | Sealed 0.50/1.0 Conn. 200Pos. Cap Housing Assembly (Male Connector)            |
|                                             | 防水 0.50/1.0 コネクタ 200 極 キャップ・ハウジング・アセンブリ(オス・コネクタ)                               |
|                                             | Sealed 0.50/1.0 Conn. 160Pos. Cap Housing Assembly (Male Connector)            |
|                                             | 防水 0.50/1.0 コネクタ 160 極 キャップ・ハウジング・アセンブリ(オス・コネクタ)                               |
| 1939927                                     | Sealed 0.50/1.0 Conn. 140Pos. Plug Housing Assembly (Female Connector)         |
|                                             | 防水 0.50/1.0 コネクタ 140 極 プラグ・ハウジング・アセンブリ(メス・コネクタ)                                |
| 1554930                                     | Sealed 0.50/1.0 Conn. 140Pos. Plug Housing Assembly Type II (Female Connector) |
|                                             | 防水 0.50/1.0 コネクタ 140 極 プラグ・ハウジング・アセンブリ タイプ II (メス・コネクタ)                        |
| 2069842                                     | Sealed 0.50/1.0 Conn. 100Pos. Plug Housing Assembly (Female Connector)         |
|                                             | 防水 0.50/1.0 コネクタ 100 極 プラグ・ハウジング・アセンブリ(メス・コネクタ)                                |
| 1939938                                     | Sealed 0.50/1.0 Conn. 60Pos. Plug Housing Assembly (Female Connector)          |
|                                             | 防水 0.50/1.0 コネクタ 60 極 プラグ・ハウジング・アセンブリ(メス・コネクタ)                                 |
| 1554545                                     | Sealed 0.50/1.0 Conn. 60Pos. Plug Housing Assembly Type II (Female Connector)  |
|                                             | 防水 0.50/1.0 コネクタ 60 極 プラグ・ハウジング・アセンブリ タイプ II (メス・コネクタ)                         |
| 1939932                                     | Sealed 0.50/1.0 Conn. 140Pos. Lever                                            |
|                                             | 防水 0.50/1.0 コネクタ 140 極 レバー                                                     |
| 2013360                                     | Sealed 0.50/1.0 Conn. 140Pos. Wire Cover                                       |
|                                             | ワイヤカバー140 極                                                                    |
| 2069957                                     | Sealed 0.50/1.0 Conn. 140Pos. Wire Cover Type II                               |
|                                             | ワイヤカバー140 極 タイプ II                                                             |
| 1554740                                     | Sealed 0.50/1.0 Conn. 140Pos. Wire Cover Type III                              |
|                                             | ワイヤカバー140 極 タイプ III                                                            |
| 2229025                                     | Sealed 0.50/1.0 Conn. 140Pos. Wire Cover Type IV                               |
|                                             | ワイヤカバー140 極 タイプ IV                                                             |
| 2040009                                     | Sealed 0.50/1.0 Conn. 60Pos. Wire Cover Assembly                               |
|                                             | 防水 0.50/1.0 コネクタ 60 極 ワイヤカバー・アッセンブリ                                            |
| 1939349                                     | Sealed 0.50 Receptacle (Sn)                                                    |
|                                             | 防水 0.50 リセプタクル(錫めっき)                                                           |
| 1939350                                     | Sealed 0.50 Receptacle (Au)                                                    |
|                                             | 防水 0.50 リセプタクル(金めっき)                                                           |
| 2069401                                     | Sealed 0.50 Receptacle (Au) L Barrel                                           |
|                                             | 防水 0.50 リセプタクル(金めっき) L バレル                                                     |
| 1939351                                     | Sealed 1.0 Receptacle (Sn)                                                     |
|                                             | 防水 1.0 リセプタクル(錫めっき)                                                            |
| 1981878                                     | Sealed 0.50 Receptacle (Sn S size)                                             |
|                                             | 防水 0.50 リセプタクル(錫めっき S サイズ)                                                     |

Fig. 1(End おわり)

\*<sup>1</sup>: 型番(パーツナンバー)は、リスト中の親番にダッシュ付きの一桁の数字をもって構成されます。  
各親番号に対するダッシュ付き番号の詳細は顧客用図面又はカタログを参照下さい。  
尚、接頭の数字がゼロの場合は、ゼロ及びダッシュは省略されます。

\*<sup>1</sup>: Part number is consisted from listed base number and 1 digit numeric prefix and Suffix with dash.  
Refer to catalog or customer drawing for specific part numbers for each base number. When prefix is zero, zero and dash are omitted.

## 2. Test Contents 試験内容

| Para<br>項 番                       | Test Items<br>試 験 項 目                      | Requirements<br>必要条件                                                |                                              | Judgement<br>判定  |
|-----------------------------------|--------------------------------------------|---------------------------------------------------------------------|----------------------------------------------|------------------|
| 2.1                               | Confirmation of Product                    | Meets requirements of product drawing and TE Specification 114-5400 |                                              | Acceptable<br>合格 |
|                                   | 製品の確認検査                                    | 製品図面と TE 取付適用規格 114-5400 の必要条件に合致していること。                            |                                              |                  |
| Electrical Requirements 電 気 的 性 能 |                                            |                                                                     |                                              |                  |
| 2.2                               | Termination Resistance (Low Level)         | 0.50                                                                | 10m Ω Max. (Initial)<br>20m Ω Max. (Final)   | Acceptable<br>合格 |
|                                   |                                            | 1.0                                                                 | 5m Ω Max. (Initial)<br>10m Ω Max. (Final)    |                  |
|                                   | 総合抵抗(ローレベル)                                | 0.50                                                                | 10m Ω 以下(初期)<br>20m Ω 以下(終期)                 |                  |
|                                   |                                            | 1.0                                                                 | 5m Ω 以下(初期)<br>10m Ω 以下(終期)                  |                  |
| 2.3                               | Termination Resistance (Specified Current) | 0.50                                                                | 10mV/A Max. (Initial)<br>20mV/A Max. (Final) | Acceptable<br>合格 |
|                                   |                                            | 1.0                                                                 | 5mV/A Max. (Initial)<br>10mV/A Max. (Final)  |                  |
|                                   | 総合抵抗(規定電流)                                 | 0.50                                                                | 10mV/A 以下(初期)<br>20mV/A 以下(終期)               |                  |
|                                   |                                            | 1.0                                                                 | 5mV/A 以下(初期)<br>10mV/A 以下(終期)                |                  |
| 2.4                               | Insulation Resistance                      | 100M Ω Min.                                                         |                                              | Acceptable<br>合格 |
|                                   | 絶縁抵抗                                       | 100M Ω 以上                                                           |                                              |                  |
| 2.5                               | Dielectric Withstanding Voltage            | No creeping discharge or flashover shall occur                      |                                              | Acceptable<br>合格 |
|                                   | 耐電圧                                        | 沿面放電、フラッシュオーバー等がないこと                                                |                                              |                  |
| 2.6                               | Current Leakage                            | 50 μ A Max.                                                         |                                              | Acceptable<br>合格 |
|                                   | リーク電流                                      | 50 μ A 以下                                                           |                                              |                  |
| 2.7                               | Temperature Rising                         | Temperature rising : 60℃ Max.                                       |                                              | Acceptable<br>合格 |
|                                   | 温度上昇                                       | 温度上昇 : 60℃以下                                                        |                                              |                  |
| 2.8                               | Over Current Loading                       | No Ignition Is allowed during the test.                             |                                              | Acceptable<br>合格 |
|                                   | 過電流通電                                      | 試験中発火なきこと。                                                          |                                              |                  |

Fig.2 (To be continued 続く)

Mechanical Requirements 機械的性能

| Para<br>項 番 | Test Items<br>試 験 項 目                                     | Requirements<br>必要条件                                         |                     |                     |         | Judgement<br>判定  |
|-------------|-----------------------------------------------------------|--------------------------------------------------------------|---------------------|---------------------|---------|------------------|
| 2.9         | Vibration<br>(High Frequency)                             | No electrical discontinuity greater than 1μsec. shall occur. |                     |                     |         | Acceptable<br>合格 |
|             | 振動(高周波)                                                   | 振動中 1 μ sec をこえる不連続導通を生じないこと。<br>試験順序に基づく試験項目の要求性能を満足すること。   |                     |                     |         |                  |
| 2.10        | Physical Shock                                            | No electrical discontinuity greater than 1μsec. shall occur. |                     |                     |         | Acceptable<br>合格 |
|             | 衝 撃                                                       | 衝撃により 1 μ sec をこえる不連続導通を生じないこと。                              |                     |                     |         |                  |
| 2.11        | Lever Operation force                                     | 40N Max                                                      |                     |                     |         | Acceptable<br>合格 |
|             | レバー操作力                                                    | 40N 以下                                                       |                     |                     |         |                  |
| 2.12        | Connector Locking<br>Strength                             | 100N Min.                                                    |                     |                     |         | Acceptable<br>合格 |
|             | ハウジングロック強度                                                | 100N 以上                                                      |                     |                     |         |                  |
| 2.13        | Terminal Insertion<br>Force into Plug<br>housing          | 20N Max. (per 1 terminal)                                    |                     |                     |         | Acceptable<br>合格 |
|             | 端子装着力                                                     | 20N 以下 (1 端子当たり)                                             |                     |                     |         |                  |
| 2.14        | Terminal Retention<br>Force (at final locked<br>position) | 100N Min.                                                    |                     |                     |         | Acceptable<br>合格 |
|             | 端子保持力<br>(二重係止時)                                          | 100N 以上                                                      |                     |                     |         |                  |
| 2.15        | Crimp tensile strength                                    | terminal                                                     | Wire size           | Tensile Strength【N】 |         | Acceptable<br>合格 |
|             |                                                           | 0.50                                                         | 0.3mm <sup>2</sup>  | Initial             | 50 Min  |                  |
|             |                                                           |                                                              |                     | Final               | 40 Min  |                  |
|             |                                                           |                                                              | 0.5 mm <sup>2</sup> | Initial             | 70 Min  |                  |
|             |                                                           |                                                              |                     | Final               | 50 Min  |                  |
|             |                                                           | 1.0                                                          | 0.75mm <sup>2</sup> | Initial             | 100 Min |                  |
|             |                                                           |                                                              |                     | Final               | 90 Min  |                  |
|             |                                                           |                                                              | 1.25mm <sup>2</sup> | Initial             | 175 Min |                  |
|             |                                                           |                                                              |                     | Final               | 130 Min |                  |
|             | 圧着部引張り強度                                                  | 端子                                                           | 電線サイズ               | 引張強度【N】             |         |                  |
|             |                                                           | 0.50                                                         | 0.3mm <sup>2</sup>  | 初期                  | 50 以上   |                  |
|             |                                                           |                                                              |                     | 終期                  | 40 以上   |                  |
|             |                                                           |                                                              | 0.5 mm <sup>2</sup> | 初期                  | 70 以上   |                  |
|             |                                                           |                                                              |                     | 終期                  | 50 以上   |                  |
|             |                                                           | 1.0                                                          | 0.75mm <sup>2</sup> | 初期                  | 100 以上  |                  |
|             |                                                           |                                                              |                     | 終期                  | 90 以上   |                  |
|             |                                                           |                                                              | 1.25mm <sup>2</sup> | 初期                  | 175 以上  |                  |
|             |                                                           |                                                              |                     | 終期                  | 130 以上  |                  |

Fig.2 (To be continued 続く)

| Para<br>項 番 | Test Items<br>試 験 項 目         | Requirements<br>必要条件                                         |                  | Judgement<br>判定       |
|-------------|-------------------------------|--------------------------------------------------------------|------------------|-----------------------|
| 2.16        | Resistance of “Kojiri”        | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | こじり耐久性                        | 試験順序に基づく試験項目の要求性能を満足すること。                                    |                  |                       |
| 2.17        | Solderability                 | Wet Solder Coverage:<br>95 % Min.( Plated area only)         |                  | Acceptable<br>合格      |
|             | はんだぬれ性                        | はんだぬれ面積率:<br>95%以上(めっき面のみ)                                   |                  |                       |
| 2.18        | Handling Ergonomics           | No abnormalities allowed in manual mating/unmating handling. |                  | Manually<br>operated. |
|             | 挿抜フィーリング                      | コネクタ挿入引抜時に、有害な引っ掛かりなどがないこと。                                  |                  |                       |
| 2.19        | Watertight Sealing            | Initial                                                      | Acceptable<br>合格 | Acceptable<br>合格      |
|             |                               | Final                                                        | Acceptable<br>合格 |                       |
|             | シール性                          | 初期                                                           | Acceptable<br>合格 |                       |
|             |                               | 終期                                                           | Acceptable<br>合格 |                       |
| 2.20        | Retention Force of Wire Cover | 100N Min.                                                    |                  | Acceptable<br>合格      |
|             | ワイヤカバー保持力                     | 100N 以上                                                      |                  |                       |
| 2.21        | Lever Locking Strength        | 100N Min.                                                    |                  | Acceptable<br>合格      |
|             | レバーロック強度                      | 100N 以上                                                      |                  |                       |
| 環 境 的 性 能   |                               |                                                              |                  |                       |
| 2.22        | Heat Aging (Temperature Life) | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | 温度寿命(耐熱)                      | 試験順序に基づく項目の要求性能を満足すること                                       |                  |                       |
| 2.23        | Resistance to Cold            | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | 耐寒性                           | 試験順序に基づく項目の要求性能を満足すること                                       |                  |                       |
| 2.24        | Thermal Shock                 | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | 熱衝撃                           | 試験順序に基づく項目の要求性能を満足すること                                       |                  |                       |
| 2.25        | Humidity-Temperature Cycling  | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | 温湿度サイクル                       | 試験順序に基づく項目の要求性能を満足すること                                       |                  |                       |
| 2.26        | Salt Water Spray              | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | 塩水噴霧                          | 試験順序に基づく項目の要求性能を満足すること                                       |                  |                       |
| 2.27        | Water Spray                   | Satisfy requirements of test item on the sequence.           |                  | Acceptable<br>合格      |
|             | 散水                            | 試験順序に基づく項目の要求性能を満足すること                                       |                  |                       |

Fig.2 (To be continued 続く)

| Para<br>項 番 | Test Items<br>試 験 項 目                     | Requirements<br>必要条件                                                                                               | Judgement<br>判定  |
|-------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------|
| 2.28        | Resistance to<br>High Pressure<br>Washing | Satisfy requirements of test item on the sequence.                                                                 | Acceptable<br>合格 |
|             | 高圧洗浄                                      | 試験順序に基づく項目の要求性能を満足すること                                                                                             |                  |
| 2.29        | Humidity(Steady State)                    | Satisfy requirements of test item on the sequence.                                                                 | Acceptable<br>合格 |
|             | 耐湿(定常状態)                                  | 試験順序に基づく項目の要求性能を満足すること                                                                                             |                  |
| 2.30        | Dust Bombardment                          | Satisfy requirements of test item on the sequence.                                                                 | Acceptable<br>合格 |
|             | 耐塵                                        | 試験順序に基づく項目の要求性能を満足すること                                                                                             |                  |
| 2.31        | Industrial Gas (SO <sub>2</sub> )         | Satisfy requirements of test item on the sequence.                                                                 | Acceptable<br>合格 |
|             | 工業ガス(SO <sub>2</sub> )                    | 試験順序に基づく項目の要求性能を満足すること                                                                                             |                  |
| 2.32        | Compound<br>Environment<br>Resistance     | No electrical discontinuity greater than 1μsec. shall occur.<br>Satisfy requirements of test item on the sequence. | Acceptable<br>合格 |
|             | 複合環境試験                                    | 試験中、抵抗値が 1 μ sec を超える不連続導通を生じないこと。<br>試験順序に基づく項目の要求性能を満足すること                                                       |                  |
| 2.33        | Resistance to Oil                         | Satisfy requirements of test item on the sequence.                                                                 | Acceptable<br>合格 |
|             | 耐油                                        | 試験順序に基づく項目の要求性能を満足すること                                                                                             |                  |

Fig. 2 (End おわり)

### 3. Test Sequence 試験順序

| Para | Test Item                                  | Test Group                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------|--------------------------------------------|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      |                                            | 1                             | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  |
|      |                                            | Test Procedure <sup>(a)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.1  | Confirmation of Product                    | 1                             | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,4 | 1,4 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 |
| 2.2  | Termination Resistance (Low level)         | 5                             | 4   | 4   |     | 4   | 4   | 5   |     |     |     | 4   | 4   | 4   |     | 4   | 4   |     |
| 2.3  | Termination Resistance (Specified Current) | 6                             | 5   | 5   |     | 5   | 5   | 6   |     |     |     | 5   | 5   | 5   |     | 5   | 5   |     |
| 2.4  | Insulation Resistance                      | 8                             |     |     |     |     | 6   | 7   | 5   | 4   | 4   |     |     |     |     |     |     |     |
| 2.5  | Dielectric Withstanding Voltage            | 9                             |     |     |     |     | 7   | 8   | 6   |     | 5   |     |     |     |     |     |     |     |
| 2.6  | Current Leakage                            |                               |     |     |     |     |     | 3   | 3   |     |     |     |     |     |     |     |     |     |
| 2.7  | Temperature Rise                           | 7                             |     | 6   |     |     |     |     |     |     |     |     |     |     |     |     | 6   |     |
| 2.8  | Over Current Loading                       |                               |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |
| 2.9  | Vibration (High Frequency)                 |                               |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |
| 2.10 | Shock                                      |                               |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |
| 2.11 | Lever Operation force (ON)                 | 4                             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|      | Lever Operation force (OFF)                | 11                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.12 | Connector Locking Strength                 | 13                            |     | 9   |     | 8   | 10  |     |     |     | 6   |     |     |     |     |     |     |     |
| 2.13 | Terminal Insertion Force                   | 2                             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.14 | Terminal Retention Force                   | 14                            |     | 10  | 5   | 9   | 11  | 9   |     |     | 7   |     |     |     |     |     |     |     |
| 2.15 | Crimp tensile strength                     | 15                            |     | 11  |     | 10  |     |     |     |     |     |     | 6   |     |     |     |     |     |
| 2.16 | Resistance of "Kojiri"                     |                               | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.17 | Solderability                              | 3                             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.18 | Handling Ergonomics                        | 12                            |     | 8   |     | 7   | 9   |     |     |     |     |     |     |     |     |     |     |     |
| 2.19 | Watertight Sealing                         | 10                            | 6   | 7   | 4   | 6   | 8   |     |     |     |     |     |     |     |     |     |     | 4   |
| 2.20 | Retention Force of Wire Cover              | 16                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.21 | Lever Tip Locking Strength                 | 17                            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.22 | Heat Aging                                 |                               |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.23 | Resistance to Cold                         |                               |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.24 | Thermal Shock                              |                               |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.25 | Humidity-Temperature Cycling               |                               |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |
| 2.26 | Salt Water Spray                           |                               |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |
| 2.27 | Water Spray                                |                               |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |
| 2.28 | Resistance to High Pressure Washing        |                               |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |
| 2.29 | Humidity (Steady State)                    |                               |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |
| 2.30 | Dust Bombardment                           |                               |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |
| 2.31 | Industrial Gas (SO <sub>2</sub> )          |                               |     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |
| 2.32 | Compound Environment Resistance            |                               |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |
| 2.33 | Resistance to Oil                          |                               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |

(a)Numbers indicate sequence in which tests are performed.

Fig. 3 (To be continued 続く)

| 項番   | 試験項目        | 試験グループ              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------|-------------|---------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      |             | 1                   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  |
|      |             | 試験順序 <sup>(a)</sup> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.1  | 製品の確認検査     | 1                   | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,4 | 1,4 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 | 1,3 |
| 2.2  | 総合抵抗(ローレベル) | 5                   | 4   | 4   |     | 4   | 4   | 5   |     |     |     | 4   | 4   | 4   |     | 4   | 4   |     |
| 2.3  | 総合抵抗(規定電流)  | 6                   | 5   | 5   |     | 5   | 5   | 6   |     |     |     | 5   | 5   | 5   |     | 5   | 5   |     |
| 2.4  | 絶縁抵抗        | 8                   |     |     |     |     | 6   | 7   | 5   | 4   | 4   |     |     |     |     |     |     |     |
| 2.5  | 耐電圧         | 9                   |     |     |     |     | 7   | 8   | 6   |     | 5   |     |     |     |     |     |     |     |
| 2.6  | リーク電流       |                     |     |     |     |     |     | 3   | 3   |     |     |     |     |     |     |     |     |     |
| 2.7  | 温度上昇        | 7                   |     | 6   |     |     |     |     |     |     |     |     |     |     |     |     | 6   |     |
| 2.8  | 過電流通電       |                     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |
| 2.9  | 振動(高周波)     |                     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |
| 2.10 | 衝撃          |                     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |
| 2.11 | レバー操作力(挿)   | 4                   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|      | レバー操作力(抜)   | 11                  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.12 | ハウジングロック強度  | 13                  |     | 9   |     | 8   | 10  |     |     |     | 6   |     |     |     |     |     |     |     |
| 2.13 | 端子装着力       | 2                   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.14 | 端子保持力       | 14                  |     | 10  | 5   | 9   | 11  | 9   |     |     | 7   |     |     |     |     |     |     |     |
| 2.15 | 圧着部引張強度     | 15                  |     | 11  |     | 10  |     |     |     |     |     |     | 6   |     |     |     |     |     |
| 2.16 | こじり耐久       |                     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.17 | はんだぬれ性      | 3                   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.18 | 挿抜フィーリング    | 12                  |     | 8   |     | 7   | 9   |     |     |     |     |     |     |     |     |     |     |     |
| 2.19 | シール性        | 10                  | 6   | 7   | 4   | 6   | 8   |     |     |     |     |     |     |     |     |     |     | 4   |
| 2.20 | ワイヤカバー保持力   | 16                  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.21 | レバーロック強度    | 17                  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.22 | 温度寿命(耐熱)    |                     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.23 | 耐寒性         |                     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.24 | 熱衝撃         |                     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |     |
| 2.25 | 温湿度サイクル     |                     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |     |
| 2.26 | 塩水噴霧        |                     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |     |
| 2.27 | 散水          |                     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |     |
| 2.28 | 高圧洗浄        |                     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |     |
| 2.29 | 耐湿(定常状態)    |                     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |     |
| 2.30 | 耐塵          |                     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |     |
| 2.31 | 工業ガス        |                     |     |     |     |     |     |     |     |     |     |     | 2   |     |     |     |     |     |
| 2.32 | 複合環境        |                     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |     |
| 2.33 | 耐油          |                     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 2   |

(a)内の数字は試験を実施する順序を示す。

Fig.3 (End おわり)

4. Summary of Test Result 試験結果の要約

| Test Group<br>試験<br>グループ | Test Items<br>測定項目                                                       |      |                                              | MAX.<br>最大値             | MIN.<br>最小値          | AVE.<br>平均値          | Spec.<br>規格値                                                             | Judgement<br>判定 |
|--------------------------|--------------------------------------------------------------------------|------|----------------------------------------------|-------------------------|----------------------|----------------------|--------------------------------------------------------------------------|-----------------|
| 1                        | Confirmation of product<br>製品の確認                                         |      |                                              | Good appearance<br>問題なし |                      |                      | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと            | OK              |
|                          | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn                                       | 3.48                    | 1.52                 | 2.79                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                       | 4.44                    | 2.66                 | 3.44                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                          | 1.75                    | 1.12                 | 1.39                 | 5 Max.                                                                   | OK              |
|                          |                                                                          | 60P  | 0.50Sn                                       | 2.87                    | 2.04                 | 2.51                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                       | 3.87                    | 2.44                 | 3.11                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                          | 1.38                    | 0.97                 | 1.18                 | 5 Max.                                                                   | OK              |
|                          | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn                                       | 3.83                    | 2.14                 | 2.99                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                       | 3.26                    | 2.14                 | 2.67                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                          | 2.00                    | 1.10                 | 1.45                 | 5 Max.                                                                   | OK              |
|                          |                                                                          | 60P  | 0.50Sn                                       | 3.64                    | 2.61                 | 3.02                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                       | 3.02                    | 2.31                 | 2.72                 | 10 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                          | 1.55                    | 1.13                 | 1.32                 | 5 Max.                                                                   | OK              |
|                          | Insulation Resistance<br>絶縁抵抗<br>[MΩ]                                    | 140P | Inter-Contact<br>コンタ外相互間                     | 1.44×10 <sup>7</sup>    | 9.97×10 <sup>5</sup> | 6.51×10 <sup>6</sup> | 100 Min.                                                                 | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外ハウジング間 | 4.66×10 <sup>7</sup>    | 2.00×10 <sup>7</sup> | 3.07×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                                                          | 60P  | Inter-Contact<br>コンタ外相互間                     | 2.35×10 <sup>7</sup>    | 2.37×10 <sup>6</sup> | 1.18×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外ハウジング間 | 7.63×10 <sup>6</sup>    | 3.34×10 <sup>6</sup> | 5.09×10 <sup>6</sup> |                                                                          | OK              |
|                          | Dielectric<br>Withstanding<br>Voltage<br>耐電圧                             | 140P | Inter-Contact<br>コンタ外相互間                     | Good<br>問題なし            |                      |                      | No creeping<br>discharge or<br>flashover shall<br>occur.<br>絶縁破壊な<br>きこと | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                                                          | 60P  | Inter-Contact<br>コンタ外相互間                     | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          | Temperature Rising<br>温度上昇[°C]                                           | 140P | 0.50                                         | 8.7                     | 6.5                  | 7.70                 | 60 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                          | 8.5                     | 5.8                  | 7.51                 |                                                                          | OK              |
|                          |                                                                          | 60P  | 0.50                                         | 6.4                     | 5.1                  | 5.89                 |                                                                          | OK              |
|                          |                                                                          |      | 1.0                                          | 6.4                     | 5.0                  | 5.75                 |                                                                          | OK              |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目                                                            |        |             | MAX.<br>最大値             | MIN.<br>最小値 | AVE.<br>平均値 | Spec.<br>規格値                                                                              | Judgement<br>判定 |    |
|--------------------------|-------------------------------------------------------------------------------|--------|-------------|-------------------------|-------------|-------------|-------------------------------------------------------------------------------------------|-----------------|----|
| 1                        | Lever Operation force<br>レバー操作力(挿)[N]                                         | 140P   |             | 38.8                    | 34.9        | 37.0        | 40 Max.                                                                                   | OK              |    |
|                          |                                                                               | 60P    |             | 35.8                    | 35.0        | 35.3        |                                                                                           | OK              |    |
|                          | Lever Operation force<br>レバー操作力(抜)[N]                                         | 140P   |             | 21.1                    | 12.6        | 15.8        | 70 Max.                                                                                   | OK              |    |
|                          |                                                                               | 60P    |             | 30.4                    | 25.3        | 28.0        |                                                                                           | OK              |    |
|                          | Housing Locking<br>Strength<br>ハウジングロック強度[N]                                  | 140P   |             | 1013                    | 981         | 1020        | 100 Min.                                                                                  | OK              |    |
|                          |                                                                               | 60P    |             | 844                     | 664         | 728         |                                                                                           | OK              |    |
|                          | Terminal Insertion Force<br>端子装着力[N]                                          | 0.50   |             | 8.13                    | 4.51        | 5.93        | 20 Max.                                                                                   | OK              |    |
|                          |                                                                               | 1.0    |             | 9.55                    | 5.73        | 7.61        |                                                                                           | OK              |    |
|                          | Terminal Retention<br>force<br>端子保持力[N]                                       | 140P   | 0.50        | 135                     | 106         | 125         | 100 Min.★ <sup>3</sup>                                                                    | OK              |    |
|                          |                                                                               |        | 1.0         | 280                     | 186         | 240         |                                                                                           | OK              |    |
|                          |                                                                               | 60P    | 0.50        | 133                     | 106         | 121         |                                                                                           | OK              |    |
|                          |                                                                               |        | 1.0         | 239                     | 185         | 214         |                                                                                           | OK              |    |
|                          | Crimp Tensile Strength<br>圧着部引張強度[N]                                          | 0.50Sn |             | 127                     | 119         | 124         | 70 Min.                                                                                   | OK              |    |
|                          |                                                                               | 0.50Au |             | 118                     | 101         | 108         |                                                                                           | OK              |    |
|                          |                                                                               | 1.0    |             | 246                     | 224         | 234         | 175 Min.                                                                                  | OK              |    |
|                          | Solderability<br>はんだぬれ性                                                       |        |             | Good<br>問題なし            |             |             | Wet Solder Coverage:<br>95 % Min.( Plated<br>area only)<br>はんだぬれ面積率:<br>95%以上(めっき面<br>のみ) |                 | OK |
|                          | Handling Ergonomics<br>挿抜フィーリング                                               |        |             | Good<br>問題なし            |             |             | No abnormalities<br>異常なきこと                                                                |                 | OK |
|                          | Watertight Sealing<br>シール性[kPa]                                               | 140P   |             | 190                     | 150         | 173         | 50 Min.                                                                                   | OK              |    |
|                          |                                                                               | 60P    |             | 250                     | 230         | 240         | 50 Min.                                                                                   | OK              |    |
|                          | Retention Force of<br>Wire Cover★ <sup>2</sup><br>ワイヤカバー保持力[N] ★ <sup>2</sup> | 140P   | Left<br>左方向 | 152.5                   | 152.0       | 152.3       | 100 Min.                                                                                  | OK              |    |
|                          |                                                                               | 60P    | Up<br>上方向   | 329.5                   | 231.5       | 278.8       | 100 Min.                                                                                  | OK              |    |
|                          | Lever Locking<br>Strength<br>レバーロック強度                                         | 140P   |             | 192.5                   | 182.5       | 187.7       | 100 Min.                                                                                  | OK              |    |
|                          |                                                                               | 60P    |             | 280.0                   | 272.5       | 276.3       |                                                                                           | OK              |    |
| 2                        | Confirmation of product<br>製品の確認                                              |        |             | Good appearance<br>問題なし |             |             | Meets requirements of<br>product drawing<br><br>外観上の異常なきこ<br>と                            | OK              |    |
|                          | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]               | 140P   | 0.50Sn      | 3.53                    | 2.19        | 2.85        | 20 Max.                                                                                   | OK              |    |
|                          |                                                                               |        | 0.50Au      | 2.91                    | 1.95        | 2.38        | 20 Max.                                                                                   | OK              |    |
|                          |                                                                               |        | 1.0         | 2.87                    | 1.26        | 1.61        | 10 Max.                                                                                   | OK              |    |
|                          |                                                                               | 60P    | 0.50Sn      | 3.69                    | 2.01        | 3.02        | 20 Max.                                                                                   | OK              |    |
|                          |                                                                               |        | 0.50Au      | 3.29                    | 2.00        | 2.43        | 20 Max.                                                                                   | OK              |    |
|                          |                                                                               |        | 1.0         | 4.17                    | 1.47        | 2.82        | 10 Max.                                                                                   | OK              |    |

\*<sup>2</sup>: Retention Force of Wire Cover measured with all terminals installed. The measurement result measures an upper and lower and before and behind and right and left directions. The lowest direction is put.

\*<sup>3</sup>: When Crimp Tensile Strength is less than 100N; more than Crimp Tensile Strength.

\*<sup>2</sup>: 全極にワイヤを装着し、ワイヤカバー保持力を測定する。測定結果は、ワイヤ取り出し口に対して上下左右前後方向を測定し、一番低い方向を載せています。

\*<sup>3</sup>: 但し圧着部強度が 100N 未満の端子の場合は圧着部強度以上。

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ        | Test Items<br>測定項目                                                    |      |        | MAX.<br>最大値             | MIN.<br>最小値 | AVE.<br>平均値 | Spec.<br>規格値                                               | Judgement<br>判定 |
|---------------------------------|-----------------------------------------------------------------------|------|--------|-------------------------|-------------|-------------|------------------------------------------------------------|-----------------|
| 2                               | Termination Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn | 4.11                    | 2.73        | 3.46        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 0.50Au | 3.38                    | 2.38        | 2.84        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 3.47                    | 1.70        | 2.54        | 10 Max.                                                    | OK              |
|                                 |                                                                       | 60P  | 0.50Sn | 4.19                    | 2.98        | 3.59        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 0.50Au | 3.95                    | 2.37        | 2.85        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 4.18                    | 1.75        | 2.88        | 10 Max.                                                    | OK              |
|                                 | Resistance of “Kojiri”<br>こじり耐久性                                      |      |        | Good<br>問題なし            |             |             | No abnormalities<br>異常なきこと                                 | OK              |
| Watertight Sealing<br>シール性[kPa] | 140P                                                                  |      | 190    | 150                     | 173         | 30 Min.     | OK                                                         |                 |
|                                 | 60P                                                                   |      | 240    | 230                     | 233         | 30 Min.     | OK                                                         |                 |
| 3                               | Confirmation of product<br>製品の確認                                      |      |        | Good appearance<br>問題なし |             |             | Meets requirements of<br>product drawing<br><br>外観上の異常なきこと | OK              |
|                                 | Termination Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn | 3.45                    | 2.06        | 2.88        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 0.50Au | 3.55                    | 1.98        | 2.60        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 1.98                    | 1.28        | 1.60        | 10 Max.                                                    | OK              |
|                                 |                                                                       | 60P  | 0.50Sn | 3.54                    | 2.34        | 3.05        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 0.50Au | 3.39                    | 1.81        | 2.51        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 3.62                    | 1.70        | 2.24        | 10 Max.                                                    | OK              |
|                                 | Termination Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn | 4.10                    | 2.59        | 3.40        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 0.50Au | 4.21                    | 2.55        | 3.16        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 2.38                    | 1.45        | 1.89        | 10 Max.                                                    | OK              |
|                                 |                                                                       | 60P  | 0.50Sn | 4.10                    | 2.96        | 3.59        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 0.50Au | 4.04                    | 2.30        | 2.98        | 20 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 3.85                    | 1.90        | 2.38        | 10 Max.                                                    | OK              |
|                                 | Temperature Rising<br>温度上昇[°C]                                        | 140P | 0.50   | 11.2                    | 8.1         | 9.84        | 60 Max.                                                    | OK              |
|                                 |                                                                       |      | 1.0    | 11.3                    | 9.6         | 10.3        |                                                            | OK              |
|                                 |                                                                       | 60P  | 0.50   | 7.7                     | 6.5         | 7.11        |                                                            | OK              |
|                                 |                                                                       |      | 1.0    | 7.6                     | 6.3         | 7.05        |                                                            | OK              |
|                                 | Housing Locking<br>Strength<br>ハウジングロック強度[N]                          | 140P |        | 1220                    | 930         | 1117        | 100 Min.                                                   | OK              |
|                                 |                                                                       | 60P  |        | 962                     | 914         | 935         | 100 Min.                                                   | OK              |
|                                 | Terminal Retention<br>force<br>端子保持力[N]                               | 140P | 0.50   | 115.7                   | 85.6        | 99.8        | 100 Min.* <sup>3</sup>                                     | OK              |
|                                 |                                                                       |      | 1.0    | 198.8                   | 177.8       | 189.2       |                                                            | OK              |
|                                 |                                                                       | 60P  | 0.50   | 114.9                   | 83.2        | 101.4       |                                                            | OK              |
|                                 |                                                                       |      | 1.0    | 199.2                   | 183.8       | 191.3       |                                                            | OK              |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ                                           | Test Items<br>測定項目                   |                                  |              | MAX.<br>最大値             | MIN.<br>最小値             | AVE.<br>平均値                | Spec.<br>規格値                                        | Judgement<br>判定                                     |
|--------------------------------------------------------------------|--------------------------------------|----------------------------------|--------------|-------------------------|-------------------------|----------------------------|-----------------------------------------------------|-----------------------------------------------------|
| 3                                                                  | Crimp Tensile Strength<br>圧着部引張強度[N] | 0.50Sn                           |              | 94.3                    | 79.0                    | 88.8                       | 50 Min.                                             | OK                                                  |
|                                                                    |                                      | 0.50Au                           |              | 85.5                    | 57.1                    | 73.8                       |                                                     | OK                                                  |
|                                                                    |                                      | 1.0                              |              | 168.8                   | 154.6                   | 160.8                      | 130 Min.                                            | OK                                                  |
|                                                                    | Handling Ergonomics<br>挿抜フィーリング      |                                  |              | Good<br>問題なし            |                         |                            | No abnormalities<br>異常なきこと                          | OK                                                  |
|                                                                    | Watertight Sealing<br>シール性[kPa]      | 140P                             |              | 120                     | 110                     | 113                        | 30 Min.                                             | OK                                                  |
|                                                                    |                                      | 60P                              |              | 140                     | 120                     | 127                        | 30 Min.                                             | OK                                                  |
| 4                                                                  | Confirmation of product<br>製品の確認     |                                  |              | Good appearance<br>問題なし |                         |                            | Meets requirements of product drawing<br>外観上の異常なきこと | OK                                                  |
|                                                                    | Terminal Retention force<br>端子保持力[N] | 140P                             | 0.50         | 119.6                   | 96.6                    | 108.5                      | 100 Min.★ <sup>3</sup>                              | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 189.4                   | 111.6                   | 171.3                      |                                                     | OK                                                  |
|                                                                    |                                      | 60P                              | 0.50         | 122.2                   | 102.0                   | 114.2                      |                                                     | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 184.4                   | 141.0                   | 169.4                      |                                                     | OK                                                  |
|                                                                    | Watertight Sealing<br>シール性[kPa]      | 140P                             |              | 190                     | 170                     | 180                        | 30 Min.                                             | OK                                                  |
|                                                                    |                                      | 60P                              |              | 200                     | 170                     | 173                        |                                                     | OK                                                  |
|                                                                    | 5                                    | Confirmation of product<br>製品の確認 |              |                         | Good appearance<br>問題なし |                            |                                                     | Meets requirements of product drawing<br>外観上の異常なきこと |
| Termination Resistance (Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          |                                      | 140P                             | 0.50Sn       | 3.96                    | 2.08                    | 2.83                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 0.50Au       | 2.79                    | 1.88                    | 2.37                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 3.64                    | 1.19                    | 2.24                       | 10 Max.                                             | OK                                                  |
|                                                                    |                                      | 60P                              | 0.50Sn       | 4.41                    | 3.55                    | 4.05                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 0.50Au       | 2.74                    | 1.84                    | 2.34                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 2.53                    | 1.43                    | 1.72                       | 10 Max.                                             | OK                                                  |
| Termination Resistance (Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] |                                      | 140P                             | 0.50Sn       | 4.14                    | 2.39                    | 3.06                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 0.50Au       | 3.11                    | 2.17                    | 2.63                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 3.66                    | 1.20                    | 2.15                       | 10 Max.                                             | OK                                                  |
|                                                                    |                                      | 60P                              | 0.50Sn       | 4.68                    | 3.69                    | 4.25                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 0.50Au       | 2.88                    | 1.99                    | 2.49                       | 20 Max.                                             | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 3.41                    | 1.15                    | 1.92                       | 10 Max.                                             | OK                                                  |
| Housing Locking Strength<br>ハウジングロック強度[N]                          |                                      | 140P                             |              | 635                     | 515                     | 583                        | 100 Min.                                            | OK                                                  |
|                                                                    |                                      | 60P                              |              | 749                     | 526                     | 614                        |                                                     | OK                                                  |
| Terminal Retention force<br>端子保持力[N]                               |                                      | 140P                             | 0.50         | 123.0                   | 88.7                    | 112.0                      | 100 Min.★ <sup>3</sup>                              | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 245.8                   | 133.4                   | 229.7                      |                                                     | OK                                                  |
|                                                                    |                                      | 60P                              | 0.50         | 121.0                   | 103.8                   | 110.7                      |                                                     | OK                                                  |
|                                                                    |                                      |                                  | 1.0          | 238.8                   | 179.8                   | 219.6                      |                                                     | OK                                                  |
| Crimp Tensile Strength<br>圧着部引張強度[N]                               |                                      | 0.50Sn                           |              | 114.1                   | 104.4                   | 108.2                      | 50 Min.                                             | OK                                                  |
|                                                                    |                                      | 0.50Au                           |              | 100.3                   | 89.6                    | 94.1                       |                                                     | OK                                                  |
|                                                                    |                                      | 1.0                              |              | 231.6                   | 205.4                   | 217.9                      | 130 Min.                                            |                                                     |
| Handling Ergonomics<br>挿抜フィーリング                                    |                                      |                                  | Good<br>問題なし |                         |                         | No abnormalities<br>異常なきこと | OK                                                  |                                                     |
| Watertight Sealing<br>シール性[kPa]                                    | 140P                                 |                                  | 120          | 80                      | 103                     | 30 Min.                    | OK                                                  |                                                     |
|                                                                    | 60P                                  |                                  | 170          | 160                     | 163                     | 30 Min.                    | OK                                                  |                                                     |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ        | Test Items<br>測定項目                                                       |      |                                                | MAX.<br>最大値             | MIN.<br>最小値         | AVE.<br>平均値                   | Spec.<br>規格値                                                             | Judgement<br>判定 |
|---------------------------------|--------------------------------------------------------------------------|------|------------------------------------------------|-------------------------|---------------------|-------------------------------|--------------------------------------------------------------------------|-----------------|
| 6                               | Confirmation of product<br>製品の確認                                         |      |                                                | Good appearance<br>問題なし |                     |                               | Meets<br>requirements of<br>product drawing<br>外觀上の異<br>常なきこと            | OK              |
|                                 | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn                                         | 3.37                    | 2.20                | 2.84                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 0.50Au                                         | 7.90                    | 2.85                | 3.79                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 1.0                                            | 3.34                    | 1.25                | 2.06                          | 10 Max.                                                                  | OK              |
|                                 |                                                                          | 60P  | 0.50Sn                                         | 3.95                    | 2.20                | 3.03                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 0.50Au                                         | 5.50                    | 2.35                | 3.35                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 1.0                                            | 2.56                    | 1.22                | 1.84                          | 10 Max.                                                                  | OK              |
|                                 | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn                                         | 3.71                    | 2.53                | 3.19                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 0.50Au                                         | 5.61                    | 3.24                | 4.10                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 1.0                                            | 3.76                    | 1.38                | 2.53                          | 10 Max.                                                                  | OK              |
|                                 |                                                                          | 60P  | 0.50Sn                                         | 4.23                    | 2.58                | 3.23                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 0.50Au                                         | 7.20                    | 2.59                | 3.71                          | 20 Max.                                                                  | OK              |
|                                 |                                                                          |      | 1.0                                            | 3.09                    | 1.26                | 2.31                          | 10 Max.                                                                  | OK              |
|                                 | Insulation Resistance<br>絶縁抵抗[MΩ]                                        | 140P | Inter-Contact<br>コンタクト相互間                      | 2.3×10 <sup>6</sup>     | 1.3×10 <sup>6</sup> | 1.79×10 <sup>6</sup>          | 100 Min.                                                                 | OK              |
|                                 |                                                                          |      | Between Contact<br>and Housing<br>コンタクト-ハウジング間 | 1.6×10 <sup>7</sup>     | 4.1×10 <sup>5</sup> | 6.22×10 <sup>6</sup>          |                                                                          | OK              |
|                                 |                                                                          | 60P  | Inter-Contact<br>コンタクト相互間                      | 6.9×10 <sup>6</sup>     | 3.2×10 <sup>6</sup> | 4.80×10 <sup>6</sup>          |                                                                          | OK              |
|                                 |                                                                          |      | Between Contact<br>and Housing<br>コンタクト-ハウジング間 | 4.8×10 <sup>6</sup>     | 2.8×10 <sup>5</sup> | 2.12×10 <sup>6</sup>          |                                                                          | OK              |
|                                 | Dielectric<br>Withstanding<br>Voltage<br>耐電圧                             | 140P | Inter-Contact<br>コンタクト相互間                      | Good<br>問題なし            |                     |                               | No creeping<br>discharge or<br>flashover shall<br>occur.<br>絶縁破壊な<br>きこと | OK              |
|                                 |                                                                          |      | Between Contact<br>and Housing<br>コンタクト-ハウジング間 | Good<br>問題なし            |                     |                               |                                                                          | OK              |
|                                 |                                                                          | 60P  | Inter-Contact<br>コンタクト相互間                      | Good<br>問題なし            |                     |                               |                                                                          | OK              |
|                                 |                                                                          |      | Between Contact<br>and Housing<br>コンタクト-ハウジング間 | Good<br>問題なし            |                     |                               |                                                                          | OK              |
|                                 | Housing Locking<br>Strength<br>ハウジングロック強度[N]                             | 140P |                                                | 535.5                   | 450.5               | 490.7                         | 100 Min.                                                                 | OK              |
|                                 |                                                                          | 60P  |                                                | 531.5                   | 519.0               | 524.3                         |                                                                          | OK              |
|                                 | Terminal Retention<br>force<br>端子保持力[N]                                  | 140P | 0.50                                           | 131.3                   | 111.4               | 121.4                         | 100 Min.* <sup>3</sup>                                                   | OK              |
|                                 |                                                                          |      | 1.0                                            | 249.0                   | 214.0               | 230.0                         |                                                                          | OK              |
|                                 |                                                                          | 60P  | 0.50                                           | 135.6                   | 116.0               | 126.5                         |                                                                          | OK              |
|                                 |                                                                          |      | 1.0                                            | 246.8                   | 178.0               | 232.2                         |                                                                          | OK              |
| Handling Ergonomics<br>挿抜フィーリング |                                                                          |      | Good<br>問題なし                                   |                         |                     | No<br>abnormalities<br>異常なきこと | OK                                                                       |                 |
| Watertight Sealing<br>シール性[kPa] | 140P                                                                     |      | 160                                            | 120                     | 140                 | 30 Min.                       | OK                                                                       |                 |
|                                 | 60P                                                                      |      | 210                                            | 200                     | 203                 |                               | OK                                                                       |                 |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目                                                       |      |                                               | MAX.<br>最大値             | MIN.<br>最小値          | AVE.<br>平均値          | Spec.<br>規格値                                                             | Judgement<br>判定 |
|--------------------------|--------------------------------------------------------------------------|------|-----------------------------------------------|-------------------------|----------------------|----------------------|--------------------------------------------------------------------------|-----------------|
| 7                        | Confirmation of product<br>製品の確認                                         |      |                                               | Good appearance<br>問題なし |                      |                      | Meets<br>requirements of<br>product drawing<br>外觀上の異<br>常なきこと            | OK              |
|                          | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn                                        | 5.33                    | 3.29                 | 4.16                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 4.43                    | 2.19                 | 3.14                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 2.88                    | 1.20                 | 2.08                 | 10 Max.                                                                  | OK              |
|                          |                                                                          | 60P  | 0.50Sn                                        | 6.95                    | 3.92                 | 4.80                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 5.66                    | 2.46                 | 3.20                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 3.43                    | 1.81                 | 2.43                 | 10 Max.                                                                  | OK              |
|                          | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn                                        | 7.03                    | 3.57                 | 4.89                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 6.16                    | 2.42                 | 3.56                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 3.25                    | 1.39                 | 2.16                 | 10 Max.                                                                  | OK              |
|                          |                                                                          | 60P  | 0.50Sn                                        | 7.44                    | 4.19                 | 5.20                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 6.49                    | 2.67                 | 3.76                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 4.54                    | 2.10                 | 3.09                 | 10 Max.                                                                  | OK              |
|                          | Insulation Resistance<br>絶縁抵抗<br>[MΩ]                                    | 140P | Inter-Contact<br>コンタ外相互間                      | 8.95×10 <sup>4</sup>    | 1.15×10 <sup>3</sup> | 3.19×10 <sup>4</sup> | 100 Min.                                                                 | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 6.83×10 <sup>7</sup>    | 6.31×10 <sup>6</sup> | 3.57×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                                                          | 60P  | Inter-Contact<br>コンタ外相互間                      | 8.54×10 <sup>5</sup>    | 2.92×10 <sup>4</sup> | 5.28×10 <sup>5</sup> |                                                                          | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 4.16×10 <sup>7</sup>    | 4.93×10 <sup>6</sup> | 1.78×10 <sup>7</sup> |                                                                          | OK              |
|                          | Dielectric<br>Withstanding<br>Voltage<br>耐電圧                             | 140P | Inter-Contact<br>コンタ外相互間                      | Good<br>問題なし            |                      |                      | No creeping<br>discharge or<br>flashover shall<br>occur.<br>絶縁破壊な<br>きこと | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                                                          | 60P  | Inter-Contact<br>コンタ外相互間                      | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          | Current Leakage<br>リーク電流[μA]                                             | 140P |                                               | 7μ                      |                      |                      | 50 Max.                                                                  | OK              |
|                          |                                                                          | 60P  |                                               | 7μ                      |                      |                      |                                                                          | OK              |
|                          | Terminal Retention<br>force<br>端子保持力[N]                                  | 140P | 0.50                                          | 116.3                   | 75.5                 | 98.1                 | 100 Min.* <sup>3</sup>                                                   | OK              |
|                          |                                                                          |      | 1.0                                           | 196.4                   | 165.2                | 180.6                |                                                                          | OK              |
|                          |                                                                          | 60P  | 0.50                                          | 115.2                   | 80.7                 | 98.4                 |                                                                          | OK              |
|                          |                                                                          |      | 1.0                                           | 189.2                   | 162.8                | 176.3                |                                                                          | OK              |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目                           |      |                                               | MAX.<br>最大値             | MIN.<br>最小値          | AVE.<br>平均値          | Spec.<br>規格値                                                             | Judgement<br>判定 |
|--------------------------|----------------------------------------------|------|-----------------------------------------------|-------------------------|----------------------|----------------------|--------------------------------------------------------------------------|-----------------|
| 8                        | Confirmation of product<br>製品の確認             |      |                                               | Good appearance<br>問題なし |                      |                      | Meets<br>requirements of<br>product drawing<br>外觀上の異<br>常なきこと            | OK              |
|                          | Insulation Resistance<br>絶縁抵抗[MΩ]            | 140P | Inter-Contact<br>コンタ外相互間                      | 1.21×10 <sup>5</sup>    | 6.13×10 <sup>2</sup> | 4.30×10 <sup>4</sup> | 100 Min.                                                                 | OK              |
|                          |                                              |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 5.57×10 <sup>7</sup>    | 1.70×10 <sup>6</sup> | 2.41×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                              | 60P  | Inter-Contact<br>コンタ外相互間                      | 1.36×10 <sup>7</sup>    | 5.08×10 <sup>6</sup> | 8.79×10 <sup>6</sup> |                                                                          | OK              |
|                          |                                              |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 1.88×10 <sup>8</sup>    | 1.26×10 <sup>7</sup> | 8.20×10 <sup>7</sup> |                                                                          | OK              |
|                          | Dielectric<br>Withstanding<br>Voltage<br>耐電圧 | 140P | Inter-Contact<br>コンタ外相互間                      | Good<br>問題なし            |                      |                      | No creeping<br>discharge or<br>flashover shall<br>occur.<br>絶縁破壊な<br>きこと | OK              |
|                          |                                              |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                              | 60P  | Inter-Contact<br>コンタ外相互間                      | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                              |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          | Current Leakage<br>リーク電流[μA]                 | 140P |                                               | 20μ                     |                      |                      | 50 Max.                                                                  | OK              |
|                          |                                              | 60P  |                                               | 20μ                     |                      |                      |                                                                          | OK              |
| 9                        | Confirmation of product<br>製品の確認             |      |                                               | Good appearance<br>問題なし |                      |                      | Meets<br>requirements of<br>product drawing<br>外觀上の異<br>常なきこと            | OK              |
|                          | Insulation Resistance<br>絶縁抵抗[MΩ]            | 140P | Inter-Contact<br>コンタ外相互間                      | 1.88×10 <sup>7</sup>    | 1.77×10 <sup>7</sup> | 1.84×10 <sup>7</sup> | 100 Min.                                                                 | OK              |
|                          |                                              |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 9.95×10 <sup>7</sup>    | 1.40×10 <sup>7</sup> | 4.45×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                              | 60P  | Inter-Contact<br>コンタ外相互間                      | 4.54×10 <sup>7</sup>    | 2.90×10 <sup>7</sup> | 3.82×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                              |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 5.74×10 <sup>8</sup>    | 5.40×10 <sup>7</sup> | 2.32×10 <sup>7</sup> |                                                                          | OK              |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目                                                       |      |                                               | MAX.<br>最大値             | MIN.<br>最小値          | AVE.<br>平均値          | Spec.<br>規格値                                                             | Judgement<br>判定 |
|--------------------------|--------------------------------------------------------------------------|------|-----------------------------------------------|-------------------------|----------------------|----------------------|--------------------------------------------------------------------------|-----------------|
| 10                       | Confirmation of product<br>製品の確認                                         |      |                                               | Good appearance<br>問題なし |                      |                      | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと            | OK              |
|                          | Insulation Resistance<br>絶縁抵抗[MΩ]                                        | 140P | Inter-Contact<br>コンタ外相互間                      | 5.40×10 <sup>6</sup>    | 1.02×10 <sup>5</sup> | 1.87×10 <sup>6</sup> | 100 Min.                                                                 | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 3.68×10 <sup>7</sup>    | 1.12×10 <sup>7</sup> | 2.32×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                                                          | 60P  | Inter-Contact<br>コンタ外相互間                      | 1.77×10 <sup>7</sup>    | 1.22×10 <sup>6</sup> | 1.02×10 <sup>7</sup> |                                                                          | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | 7.56×10 <sup>7</sup>    | 3.18×10 <sup>7</sup> | 5.32×10 <sup>7</sup> |                                                                          | OK              |
|                          | Dielectric<br>Withstanding<br>Voltage<br>耐電圧                             | 140P | Inter-Contact<br>コンタ外相互間                      | Good<br>問題なし            |                      |                      | No creeping<br>discharge or<br>flashover shall<br>occur.<br>絶縁破壊な<br>きこと | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                                                          | 60P  | Inter-Contact<br>コンタ外相互間                      | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          |                                                                          |      | Between Contact<br>and Housing<br>コンタ外-ハウジング間 | Good<br>問題なし            |                      |                      |                                                                          | OK              |
|                          | Housing Locking<br>Strength<br>ハウジングロック強度[N]                             | 140P |                                               | 1161                    | 965                  | 1067                 | 100 Min.                                                                 | OK              |
|                          |                                                                          | 60P  |                                               | 988                     | 924                  | 951                  |                                                                          | OK              |
|                          | Terminal Retention<br>force<br>端子保持力[N]                                  | 140P | 0.50                                          | 130.4                   | 105.2                | 117.4                | 100 Min.                                                                 | OK              |
|                          |                                                                          |      | 1.0                                           | 248.2                   | 203.2                | 232.4                |                                                                          | OK              |
|                          |                                                                          | 60P  | 0.50                                          | 129.1                   | 110.1                | 117.9                |                                                                          | OK              |
|                          |                                                                          |      | 1.0                                           | 255.4                   | 214.0                | 239.0                |                                                                          | OK              |
| 11                       | Confirmation of product<br>製品の確認                                         |      |                                               | Good appearance<br>問題なし |                      |                      | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと            | OK              |
|                          | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn                                        | 4.05                    | 2.18                 | 3.15                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 3.38                    | 1.96                 | 2.44                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 2.95                    | 1.15                 | 1.94                 | 10 Max.                                                                  | OK              |
|                          |                                                                          | 60P  | 0.50Sn                                        | 3.77                    | 2.64                 | 3.19                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 2.84                    | 1.76                 | 2.27                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 5.12                    | 1.18                 | 2.52                 | 10 Max.                                                                  | OK              |
|                          | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn                                        | 6.42                    | 3.13                 | 4.41                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 3.80                    | 2.27                 | 2.85                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 3.68                    | 1.67                 | 2.58                 | 10 Max.                                                                  | OK              |
|                          |                                                                          | 60P  | 0.50Sn                                        | 4.59                    | 3.46                 | 3.91                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 0.50Au                                        | 2.90                    | 1.91                 | 2.47                 | 20 Max.                                                                  | OK              |
|                          |                                                                          |      | 1.0                                           | 7.14                    | 1.73                 | 3.52                 | 10 Max.                                                                  | OK              |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ             | Test Items<br>測定項目                                                    |                                                                       |        |        | MAX.<br>最大値                         | MIN.<br>最小値 | AVE.<br>平均値 | Spec.<br>規格値                                                                       | Judgement<br>判定 |    |
|--------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|--------|--------|-------------------------------------|-------------|-------------|------------------------------------------------------------------------------------|-----------------|----|
| 12                                   | Confirmation of product<br>製品の確認                                      |                                                                       |        |        | Good appearance<br>問題なし             |             |             | Meets requirements of product drawing<br>外観上の異常なきこと                                | OK              |    |
|                                      | Termination Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P                                                                  | 0.50Sn |        | 3.65                                | 2.42        | 3.18        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 0.50Au |        | 3.90                                | 2.62        | 3.12        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 1.0    |        | 3.14                                | 1.30        | 1.87        | 10 Max.                                                                            | OK              |    |
|                                      |                                                                       | 60P                                                                   | 0.50Sn |        | 3.66                                | 2.73        | 3.20        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 0.50Au |        | 3.64                                | 2.51        | 3.09        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 1.0    |        | 3.27                                | 1.35        | 1.83        | 10 Max.                                                                            | OK              |    |
|                                      | Termination Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P                                                                  | 0.50Sn |        | 4.27                                | 2.66        | 3.51        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 0.50Au |        | 4.25                                | 2.89        | 3.41        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 1.0    |        | 3.61                                | 1.39        | 2.14        | 10 Max.                                                                            | OK              |    |
|                                      |                                                                       | 60P                                                                   | 0.50Sn |        | 3.82                                | 3.05        | 3.43        | 20 Max.                                                                            | OK              |    |
|                                      |                                                                       |                                                                       | 0.50Au |        | 3.87                                | 2.66        | 3.27        | 20 Max.                                                                            | OK              |    |
| 1.0                                  |                                                                       |                                                                       | 3.53   | 1.46   | 1.98                                | 10 Max.     | OK          |                                                                                    |                 |    |
| Crimp Tensile Strength<br>圧着部引張強度[N] | 0.50Sn                                                                |                                                                       |        | 127.9  | 108.9                               | 119.9       | 50 Min.     | OK                                                                                 |                 |    |
|                                      | 0.50Au                                                                |                                                                       |        | 126.3  | 113.1                               | 120.7       |             | OK                                                                                 |                 |    |
|                                      | 1.0                                                                   |                                                                       |        | 241.2  | 188.4                               | 214.5       | 130 Min.    | OK                                                                                 |                 |    |
| 13                                   | Up and Down<br>上下                                                     | Confirmation of product<br>製品の確認                                      |        |        | Good appearance<br>問題なし             |             |             | Meets requirements of product drawing<br>外観上の異常なきこと                                | OK              |    |
|                                      |                                                                       | Termination Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P   | 0.50Sn |                                     | 10.27       | 2.91        | 4.27                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 0.50Au |                                     | 9.66        | 2.13        | 3.27                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 1.0    |                                     | 6.94        | 1.41        | 2.90                                                                               | 10 Max.         | OK |
|                                      |                                                                       |                                                                       | 60P    | 0.50Sn |                                     | 9.25        | 4.02        | 6.87                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 0.50Au |                                     | 4.39        | 2.15        | 2.94                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 1.0    |                                     | 8.48        | 4.08        | 6.36                                                                               | 10 Max.         | OK |
|                                      |                                                                       | Termination Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P   | 0.50Sn |                                     | 6.79        | 2.98        | 4.08                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 0.50Au |                                     | 9.01        | 2.29        | 3.15                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 1.0    |                                     | 6.94        | 1.42        | 2.96                                                                               | 10 Max.         | OK |
|                                      |                                                                       |                                                                       | 60P    | 0.50Sn |                                     | 9.21        | 4.25        | 6.90                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 0.50Au |                                     | 3.76        | 2.27        | 2.91                                                                               | 20 Max.         | OK |
|                                      |                                                                       |                                                                       |        | 1.0    |                                     | 8.48        | 4.08        | 6.11                                                                               | 10 Max.         | OK |
|                                      |                                                                       | Electrical Discontinuity Monitoring<br>瞬断モニタ                          |        |        | No electrical discontinuity<br>瞬断なし |             |             | No electrical discontinuity greater than1μ sec. shall occur.<br>1μsecを超える不連続導通なきこと | OK              |    |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目         |                                                                          |      | MAX.<br>最大値 | MIN.<br>最小値                         | AVE.<br>平均値 | Spec.<br>規格値 | Judgement<br>判定                                                                                         |    |
|--------------------------|----------------------------|--------------------------------------------------------------------------|------|-------------|-------------------------------------|-------------|--------------|---------------------------------------------------------------------------------------------------------|----|
| 13                       | Front<br>and<br>Back<br>前後 | Confirmation of product<br>製品の確認                                         |      |             | Good appearance<br>問題なし             |             |              | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと                                           | OK |
|                          |                            | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn      | 4.99                                | 3.22        | 3.70         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 3.50                                | 2.19        | 2.76         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 7.40                                | 1.64        | 3.60         | 10 Max.                                                                                                 | OK |
|                          |                            |                                                                          | 60P  | 0.50Sn      | 7.24                                | 3.39        | 4.83         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 4.68                                | 1.82        | 2.59         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 5.29                                | 2.98        | 3.97         | 10 Max.                                                                                                 | OK |
|                          |                            | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn      | 10.90                               | 3.61        | 5.97         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 3.54                                | 2.06        | 2.87         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 8.87                                | 1.73        | 4.46         | 10 Max.                                                                                                 | OK |
|                          |                            |                                                                          | 60P  | 0.50Sn      | 7.45                                | 3.91        | 5.17         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 5.47                                | 2.01        | 2.90         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 7.00                                | 3.05        | 5.26         | 10 Max.                                                                                                 | OK |
|                          |                            | Electrical Discontinuity Monitoring<br>瞬断モニタ                             |      |             | No electrical discontinuity<br>瞬断なし |             |              | No electrical<br>discontinuity<br>greater than1μ<br>sec. shall occur.<br><br>1μsecを超える<br>不連続導通<br>なきこと | OK |
|                          | Right<br>and<br>Left<br>左右 | Confirmation of product<br>製品の確認                                         |      |             | Good appearance<br>問題なし             |             |              | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと                                           | OK |
|                          |                            | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn      | 6.15                                | 2.84        | 3.76         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 5.56                                | 2.18        | 2.76         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 5.32                                | 1.35        | 3.16         | 10 Max.                                                                                                 | OK |
|                          |                            |                                                                          | 60P  | 0.50Sn      | 7.81                                | 3.38        | 4.60         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 4.17                                | 2.18        | 2.69         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 7.07                                | 1.30        | 3.92         | 10 Max.                                                                                                 | OK |
|                          |                            | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn      | 8.81                                | 4.47        | 6.07         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 6.47                                | 5.29        | 5.84         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 5.66                                | 2.61        | 3.93         | 10 Max.                                                                                                 | OK |
|                          |                            |                                                                          | 60P  | 0.50Sn      | 5.92                                | 3.54        | 4.96         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 0.50Au      | 3.98                                | 2.31        | 2.81         | 20 Max.                                                                                                 | OK |
|                          |                            |                                                                          |      | 1.0         | 8.04                                | 1.95        | 4.96         | 10 Max.                                                                                                 | OK |
|                          |                            | Electrical Discontinuity Monitoring<br>瞬断モニタ                             |      |             | No electrical discontinuity<br>瞬断なし |             |              | No electrical<br>discontinuity<br>greater than1μ<br>sec. shall occur.<br><br>1μsecを超える<br>不連続導通<br>なきこと | OK |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目                           |                                                                |        | MAX.<br>最大値                         | MIN.<br>最小値 | AVE.<br>平均値 | Spec.<br>規格値                                                                         | Judgement<br>判定 |
|--------------------------|----------------------------------------------|----------------------------------------------------------------|--------|-------------------------------------|-------------|-------------|--------------------------------------------------------------------------------------|-----------------|
| 14                       | Confirmation of product<br>製品の確認             |                                                                |        | Good appearance<br>問題なし             |             |             | Meets requirements of product drawing<br>外觀上の異常なきこと                                  | OK              |
|                          | Electrical Discontinuity Monitoring<br>瞬断モニタ |                                                                |        | No electrical discontinuity<br>瞬断なし |             |             | No electrical discontinuity greater than 1μ sec. shall occur.<br>1μsec を超える不連続導通なきこと | OK              |
| 15                       | Confirmation of product<br>製品の確認             |                                                                |        | Good appearance<br>問題なし             |             |             | Meets requirements of product drawing<br>外觀上の異常なきこと                                  | OK              |
|                          | 0.50×0.5sq                                   | Termination Resistance (Low level)<br>総合抵抗(ローレベル) [mΩ]         | Test 1 | 3.49                                | 2.73        | 3.23        | 20 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 2 | 3.59                                | 2.77        | 3.28        | 20 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 3 | 3.63                                | 2.39        | 3.01        | 20 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 4 | 3.62                                | 2.39        | 2.96        | 20 Max.                                                                              | OK              |
|                          |                                              | Termination Resistance (Specified Current)<br>総合抵抗(規定電流)[mV/A] | Test 1 | 3.82                                | 2.84        | 3.44        | 20 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 2 | 3.83                                | 2.91        | 3.37        | 20 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 3 | 3.70                                | 2.24        | 2.97        | 20 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 4 | 3.56                                | 2.64        | 2.95        | 20 Max.                                                                              | OK              |
|                          | 1.0×1.25sq                                   | Termination Resistance (Low level)<br>総合抵抗(ローレベル) [mΩ]         | Test 1 | 1.63                                | 0.66        | 1.14        | 16 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 2 | 1.67                                | 1.46        | 1.57        | 16 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 3 | 1.50                                | 1.30        | 1.40        | 16 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 4 | 1.56                                | 1.26        | 1.41        | 16 Max.                                                                              | OK              |
|                          |                                              | Termination Resistance (Specified Current)<br>総合抵抗(規定電流)[mV/A] | Test 1 | 2.00                                | 0.71        | 1.35        | 16 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 2 | 1.84                                | 1.63        | 1.73        | 16 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 3 | 2.05                                | 1.26        | 1.65        | 16 Max.                                                                              | OK              |
|                          |                                              |                                                                | Test 4 | 2.08                                | 1.26        | 1.67        | 16 Max.                                                                              | OK              |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目             |                                                                          |      | MAX.<br>最大値 | MIN.<br>最小値             | AVE.<br>平均値 | Spec.<br>規格値 | Judgement<br>判定                                               |    |
|--------------------------|--------------------------------|--------------------------------------------------------------------------|------|-------------|-------------------------|-------------|--------------|---------------------------------------------------------------|----|
| 16                       | Up and<br>Down<br>上下           | Confirmation of product<br>製品の確認                                         |      |             | Good appearance<br>問題なし |             |              | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと | OK |
|                          |                                | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn      | 9.78                    | 2.76        | 4.11         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 10.21                   | 2.07        | 3.21         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 6.80                    | 2.34        | 3.49         | 10 Max.                                                       | OK |
|                          |                                | 総合抵抗(ローレベル)<br>[mΩ]                                                      | 60P  | 0.50Sn      | 7.86                    | 2.95        | 3.21         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 3.47                    | 2.40        | 2.85         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 7.09                    | 4.28        | 5.62         | 10 Max.                                                       | OK |
|                          |                                | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn      | 9.92                    | 3.12        | 4.42         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 10.43                   | 2.32        | 3.49         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 7.06                    | 2.46        | 3.67         | 10 Max.                                                       | OK |
|                          |                                | 総合抵抗(規定電流)<br>[mV/A]                                                     | 60P  | 0.50Sn      | 7.94                    | 3.17        | 4.09         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 3.91                    | 2.58        | 3.06         | 20 Max.                                                       | OK |
|                          | 1.0                            |                                                                          |      | 8.54        | 4.84                    | 6.52        | 10 Max.      | OK                                                            |    |
|                          | Temperature Rising<br>温度上昇[°C] | 0.50                                                                     |      | 44.3        | 25.6                    | 34.6        | 60 Max.      | OK                                                            |    |
|                          |                                | 1.0                                                                      |      | 41.3        | 22.0                    | 30.7        |              | OK                                                            |    |
|                          | Front<br>and<br>Back<br>前後     | Confirmation of product<br>製品の確認                                         |      |             | Good appearance<br>問題なし |             |              | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと | OK |
|                          |                                | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn      | 7.17                    | 2.66        | 3.71         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 9.02                    | 2.64        | 3.75         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 8.41                    | 1.81        | 3.78         | 10 Max.                                                       | OK |
|                          |                                | 総合抵抗(ローレベル)<br>[mΩ]                                                      | 60P  | 0.50Sn      | 6.26                    | 3.08        | 4.21         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 4.24                    | 2.44        | 3.20         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 6.06                    | 1.57        | 3.27         | 10 Max.                                                       | OK |
|                          |                                | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn      | 9.02                    | 2.86        | 4.23         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 9.54                    | 3.04        | 4.12         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 7.59                    | 2.57        | 4.54         | 10 Max.                                                       | OK |
|                          |                                | 総合抵抗(規定電流)<br>[mV/A]                                                     | 60P  | 0.50Sn      | 6.62                    | 3.57        | 4.82         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 0.50Au      | 4.68                    | 2.78        | 3.62         | 20 Max.                                                       | OK |
|                          |                                |                                                                          |      | 1.0         | 7.83                    | 2.15        | 5.40         | 10 Max.                                                       | OK |
|                          |                                | Temperature Rising<br>温度上昇[°C]                                           | 0.50 |             | 14.2                    | 12.7        | 13.5         | 60 Max.                                                       | OK |
|                          |                                |                                                                          | 1.0  |             | 13.3                    | 13.0        | 13.1         |                                                               | OK |

Fig.4 (To be continued 続く)

| Test Group<br>試験<br>グループ | Test Items<br>測定項目               |                                                                          |      |        | MAX.<br>最大値             | MIN.<br>最小値 | AVE.<br>平均値 | Spec.<br>規格値                                                  | Judgement<br>判定 |
|--------------------------|----------------------------------|--------------------------------------------------------------------------|------|--------|-------------------------|-------------|-------------|---------------------------------------------------------------|-----------------|
| 16                       | Right<br>and<br>Left<br>左右       | Confirmation of product<br>製品の確認                                         |      |        | Good appearance<br>問題なし |             |             | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと | OK              |
|                          |                                  | Termination<br>Resistance<br>(Low level)<br>総合抵抗(ローレベル)<br>[mΩ]          | 140P | 0.50Sn | 10.74                   | 3.19        | 5.52        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 0.50Au | 8.57                    | 2.67        | 4.19        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 1.0    | 8.44                    | 4.52        | 5.91        | 10 Max.                                                       | OK              |
|                          |                                  |                                                                          | 60P  | 0.50Sn | 5.33                    | 3.01        | 4.22        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 0.50Au | 4.12                    | 2.66        | 3.32        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 1.0    | 4.63                    | 1.50        | 3.14        | 10 Max.                                                       | OK              |
|                          |                                  | Termination<br>Resistance<br>(Specified Current)<br>総合抵抗(規定電流)<br>[mV/A] | 140P | 0.50Sn | 11.04                   | 3.21        | 5.46        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 0.50Au | 12.55                   | 2.89        | 4.47        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 1.0    | 8.08                    | 3.36        | 5.30        | 10 Max.                                                       | OK              |
|                          |                                  |                                                                          | 60P  | 0.50Sn | 5.84                    | 3.40        | 4.66        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 0.50Au | 4.46                    | 2.96        | 3.59        | 20 Max.                                                       | OK              |
|                          |                                  |                                                                          |      | 1.0    | 5.06                    | 1.69        | 3.31        | 10 Max.                                                       | OK              |
|                          |                                  | Temperature<br>Rising<br>温度上昇[°C]                                        | 0.50 |        | 18.5                    | 14.7        | 17.3        | 60 Max.                                                       | OK              |
|                          |                                  |                                                                          | 1.0  |        | 16.5                    | 13.1        | 15.4        |                                                               | OK              |
| 17                       | Confirmation of product<br>製品の確認 |                                                                          |      |        | Good appearance<br>問題なし |             |             | Meets<br>requirements of<br>product drawing<br>外観上の異<br>常なきこと | OK              |
|                          | Watertight Sealing<br>シール性[kPa]  | Test(1)<br>試験(1)                                                         | 140P | 190    | 130                     | 156.7       | 30 Min.     | OK                                                            |                 |
|                          |                                  |                                                                          | 60P  | 250    | 230                     | 240         |             | OK                                                            |                 |
|                          |                                  | Test(2)<br>試験(2)                                                         | 140P | 180    | 160                     | 166.7       |             | OK                                                            |                 |
|                          |                                  |                                                                          | 60P  | 240    | 200                     | 223.3       |             | OK                                                            |                 |
|                          |                                  | Test(3)<br>試験(3)                                                         | 140P | 180    | 170                     | 173         |             | OK                                                            |                 |
|                          |                                  |                                                                          | 60P  | 240    | 210                     | 223.3       |             | OK                                                            |                 |

Fig.4 (End おわり)