| | Working direction 1/3 | | | | | | | |
|-------------------------|-----------------------|------------------------------|---|-----------------|---|--------------------------|--|--|
| Document number | | er | SASHIJI-124912-2(2) | | Distribution | Confirmation of received | | |
| Date of issue | | | 16/Oct/ 2024 | | Distribution | | | |
| Term of validity | | | Until manufacturing completed | | FOV: PRE Mr. Phuoc , Ms. Thu, MDP Ms. Thu | | | |
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| ■New | | T-conn | T-connector cost reduction trial and evaluation for supplier change of C-slee | | | | | |
| Issue | □ Re | □ Revised C-sleeve の供給メーカー変列 | | ve の供給メーカー | 変更による外被把持コネクタの試作と評価 | | | |

1. Introduction

This working direction instructs T-connector cost reduction trial and evaluation for supplier change of C-sleeve. 本作業指示書おいて、外被把持コネクタのコストダウンのため、C-sleeve の現地メーカー品を使用した試作品製造と評価項目を指示する。

2. Scope

This wroking direction is applied into below products as S-GAISHI-71-2186-3

KY-Termination connector S-LG

KY-Termination connector S-LM-R

3. Material and Parts

C-sleeve is changed following below item . As regards other material and components , basically this trial follows material & parts should follow components list of S-GAISHI-71-2186-3.

| | LG | ì | | |
|-------------------|---------|--------|---------|--|
| C-sleeve supplier | SUMITEK | Hirota | SUMITEK | |
| Q'ty | 60 | 60 | 60 | |

4. Evaluation

(1) Optical characteristics

| | | L | LM-R | | |
|----------------|--|------------|---------|--------|---------|
| Item | Specification | total Q'ty | SUMITEC | HIROTA | SUMITEC |
| Insertion Loss | Refer to table 4 in S-GAISHI-71-2186-3 | 180 | 60 | 60 | 60 |
| Return Loss | Refer to table 4 in S-GAISHI-71-2186-3 | 180 | 60 | 60 | 60 |

(2) Function Evaluation (Test spec : refer to IEC 60874-1 or JISC 5961)

| | | | | LG | | LM-R |
|------------------------------------|---|---|------------|---------|--------|---------|
| Item | Optical characterristics | Wavelength | total Q'ty | SUMITEC | HIROTA | SUMITEC |
| Pull test | When the connection of KY-Termination connector S $\lceil SC \rfloor - \lceil \rfloor - \lceil \rfloor$ is tested with a puliing force of 10.0 N, the value of insertion loss variation before and after the test shall be 0.2 dB or less. Furthermore, there should be no harmful damage to the test sample after the test. | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | 24 | 8 | 8 | 8 |
| Bending test | When the connection part of KY-Termination connector S $\lceil SC \rfloor$ - $\lceil \rfloor$ - $\lceil \rfloor$ is bent 10 times with a tensile force of 4.9 N, the value of insertion loss variation before and after the test shall be 0.2 dB or less. Furthermore, there should be no harmful damage to the test sample after the test. | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | | | | |
| Connecting and disconnecting force | The Connecting and disconnnecting forces of KY-Termination connector S 「SC」 - 「」 - 「」 and the SC connector plug in accordance with JISC 5973 shall satisfy 19.6 N or less. | _ | | | | |
| Dulability | When KY-Termination connector S 「SC」 - 「」 - 「」 and the SC connector plug conforming to JISC 5973 are repeatedly tested 500 times while cleaning the ferrule end face every 10 times, the increase in light loss during and after the test shall be 0.2 dB or less compared to the value before the test. Furthermore, there should be no harmful damage to the test sample after the test. | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | | | | |
| Thermal Cycle Test | When KY-Termination connector S 「SC」 - 「」 - 「」 and the SC connector plug conforming to JISC 5973 is subjected to 10 cycles of heat cycling (6 hours/cycle) at -25 to +70°C, the increase in light loss during and after the test shall be 0.3 dB or less compared to the value before the test. The increase in optical loss during and after the test shall be 0.3 dB or less compared to the value before the test. Furthermore, there should be no harmful damage to the test sample after the test. | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | 24 | 8 | 8 | 8 |
| Thermal Humidity Cycling Test | When KY-Termination connector S 「SC」 - 「」 - 「」 and the SC connector plug conforming to JISC 5973 is subjected to 10 cycles of temperature and humidity cycling (24 hours/cycle) from -10 to +25 to +65°C (93% RH at 65°C), the increase in optical loss during and after the test compared to the value before the test shall be 0.3 dB or less. Furthermore, there should be no harmful damage to the test sample after the test. | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | 27 | | | |

| Thermal Age Test with high temprature | When the connection between KY-Termination connector S $\lceil SC \rfloor$ - $\lceil \rfloor$ and the SC connector plug conforming to JISC 5973 is placed in an environment of +70°C for 240 hours, the increase in light loss during and after the test shall be 0.2 dB or less in comparison with the value before the test. Furthermore, there should be no harmful damage to the test sample after the test. | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | 24 | 8 | 8 | 0 |
|---|--|---|----|---|---|---|
| Thermal Age Test with low temprature | an environment of -25°C for 240 hours, the increase in light loss during and after the test shall be 0.3 dB or less compared to the value before the | The measurement wavelength shall be any one point at 1.31±0.02μm and any one point at 1.55±0.02μ m. | 24 | ٥ | 8 | 0 |

Remark: Each tests need 8 data therefore ,for example , Pull test, Bending test, Connecting and disconnnecting force, Dulability test use same 8 sample continuously.

(3)Shipping to SG

FOV need to ship below products to SG after (1) test. Other products are needed to ship to SG.

| | LG | LM-R | | |
|-------------------|---------|--------|---------|--|
| C-sleeve supplier | SUMITEK | Hirota | SUMITEK | |
| Q'ty | 24 | 24 | 24 | |

Evaluation result should be reported to M.Matsunaga (mitsunori.matsunaga@jp.fujikura.com)

(4) Revised points from ver.1

/The number of testing are changed and add the remark for the usage way of sample. /Add the shipping Q'ty to SG