

# SMA Jack Connector

Part No. 60380 (O.D. 1.13) / 60381 (O.D. 1.37)

## Test Report

Product Specification no. PRS-2941

|      |        |                 |             |            |             |
|------|--------|-----------------|-------------|------------|-------------|
|      |        |                 |             |            |             |
| 1    | T25077 | October 8, 2025 | T. Takuno   | -          | K. Yufu     |
| 0    | T25025 | March 27, 2025  | T. Takuno   | -          | K. Yufu     |
| Rev. | ECN    | Date            | Prepared by | Checked by | Approved by |

## 1. Purpose

To evaluate the performance of SMA JackConnector in accordance with PRS-2941.

## 2. Specimen

(1) SMA Jack : 60380 (O.D. 1.13) / 60381 (O.D. 1.37)

## 3. Test Sequence

All the evaluations were performed in accordance with Table 1. Test Sequence.

## 4. Result

See Table 2-1 to 2-2, Graph 1 to 4. For the details of the testing conditions and requirements, see PRS-2941.

The “n” in the tables show the number of measurement points.

## 5. Conclusion

All the specimens met the requirements of PRS-2941.

Table 1 Test Sequence and Sample Quantity

| No.                              |   | Test Item                       | Testing Groups |   |   |     |     |   |     |
|----------------------------------|---|---------------------------------|----------------|---|---|-----|-----|---|-----|
|                                  |   |                                 | A              | B | C | D   | E   | F | G   |
| 4.1<br>Electrical Performance    | 1 | Contact resistance              |                |   |   | 1,3 | 1,3 |   | 1,3 |
|                                  | 2 | Insulation resistance           | 1              |   |   |     |     |   |     |
|                                  | 3 | Dielectric withstanding voltage |                | 1 |   |     |     |   |     |
|                                  | 4 | VSWR                            |                |   | 1 |     |     |   |     |
| 4.2<br>Mechanical Performance    | 1 | Durability                      |                |   |   | 2   |     |   |     |
|                                  | 2 | Shock                           |                |   |   |     | 2   |   |     |
|                                  | 3 | Cable retention force           |                |   |   |     |     | 1 |     |
| 4.3<br>Environmental Performance | 1 | Saltwater spray                 |                |   |   |     |     |   | 2   |
| Specimen quantity                |   |                                 | 5              | 5 | 5 | 5   | 5   | 5 | 5   |

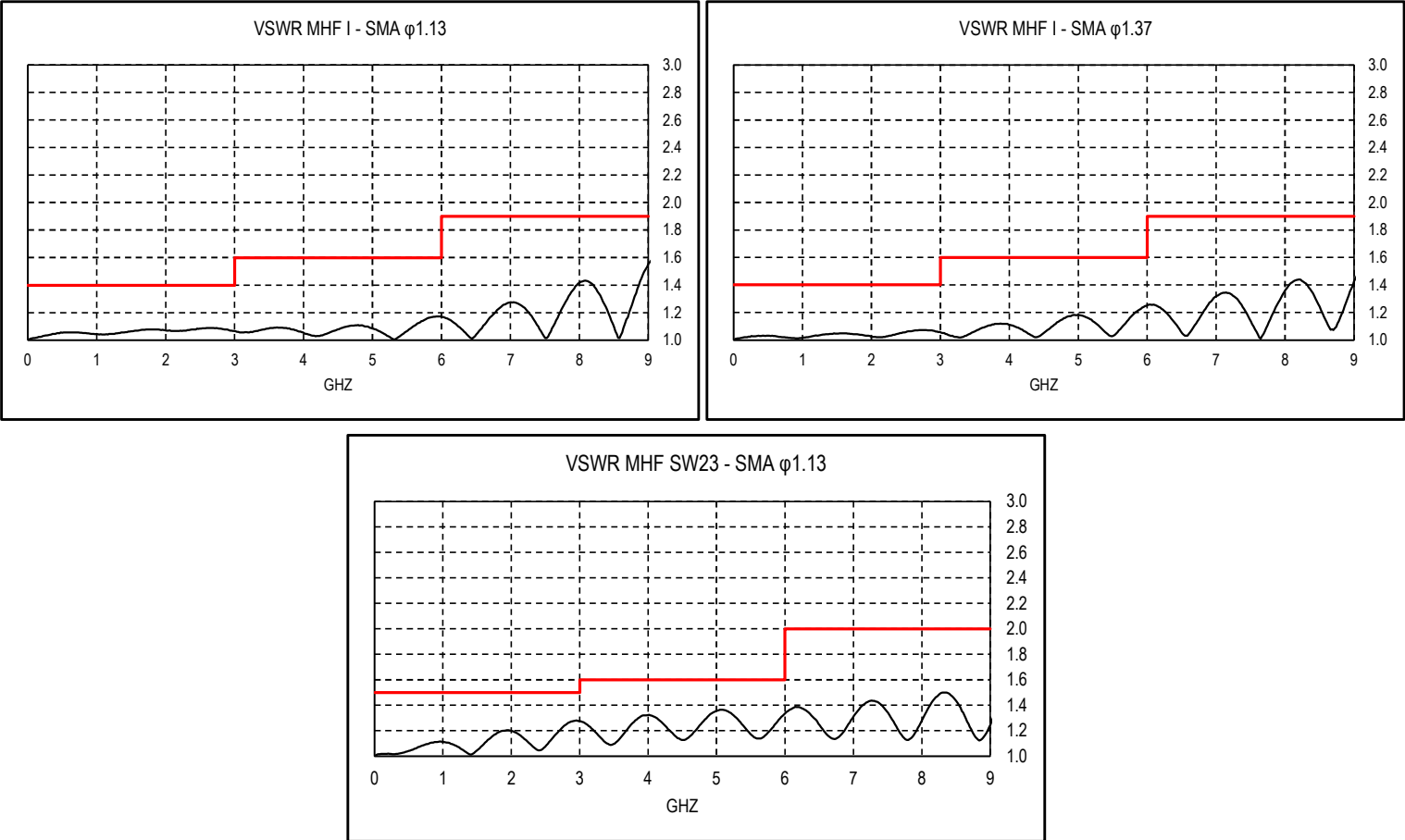
※Numbers indicate test sequences

Table 2-1 Test Result

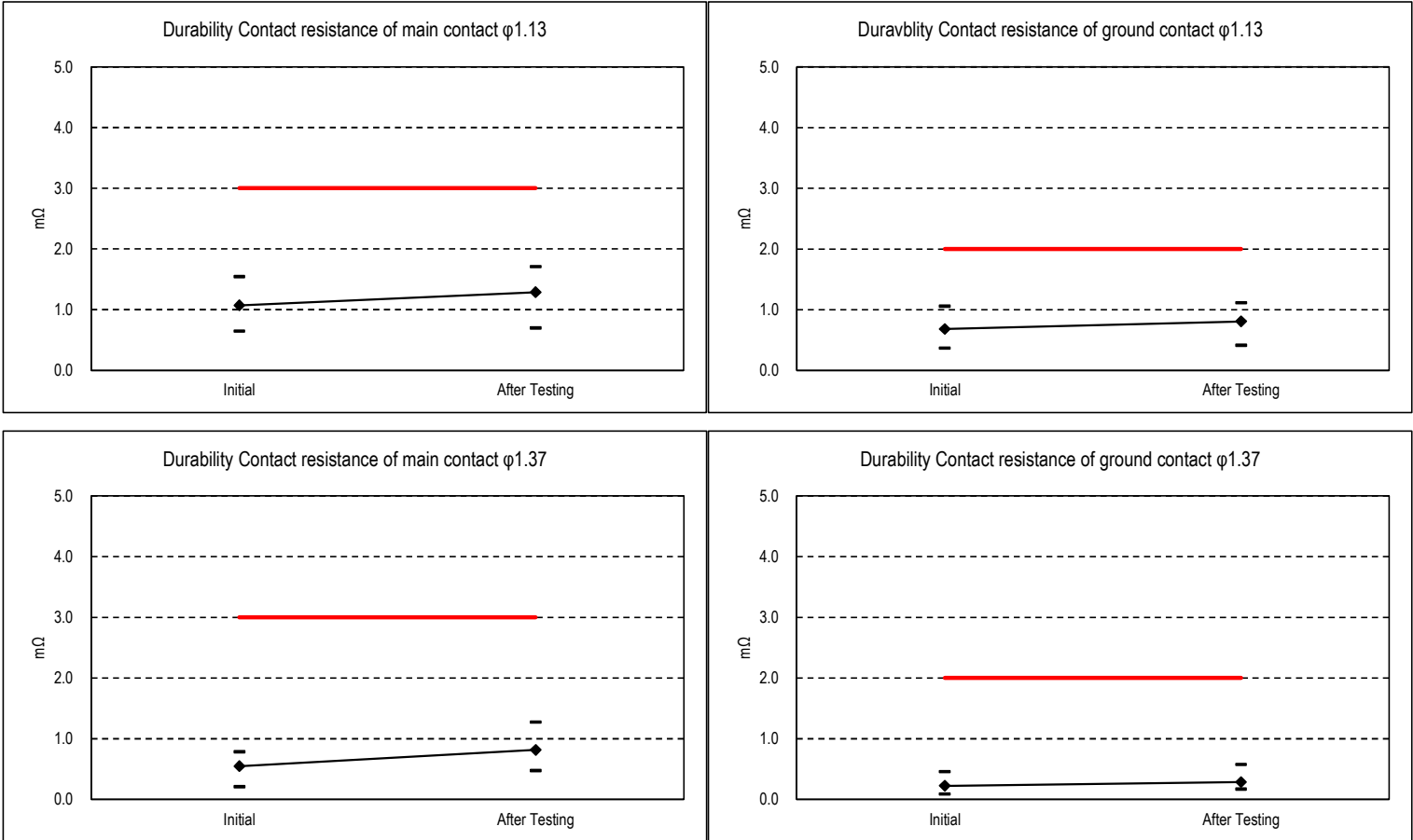
| Group         | Test items                                | Measurements                                                                             | Specification                                                   | N         | Unit | AVE.           | MAX.         | MIN. | S    | Judgement |      |
|---------------|-------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------|------|----------------|--------------|------|------|-----------|------|
| A             | Insulation resistance                     |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | φ1.13                                     | Initial                                                                                  | 500MΩ MIN                                                       | 5         | -    | 100000MΩ MIN   |              |      |      | Pass      |      |
|               |                                           | φ1.37                                                                                    | Initial                                                         | 500MΩ MIN | 5    | -              | 100000MΩ MIN |      |      |           | Pass |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
| B             | Dielectric withstanding voltage           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | φ1.13                                     | Spec. No abnormalities such as creeping discharge, flashover, insulator breakdown occur. |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | After testing                                                                            | -                                                               | 5         | -    | No abnormality |              |      |      | Pass      |      |
|               | φ1.13                                     | Spec. No abnormalities such as creeping discharge, flashover, insulator breakdown occur. |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | After testing                                                                            | -                                                               | 5         | -    | No abnormality |              |      |      | Pass      |      |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
| C             | VSWR                                      |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | φ1.13 MHF I-0 CABLE113-7 +SMA(J) 100mm    | 0.1~3.00GHz                                                                              | 1.40 Max                                                        | 5         | -    | 1.12           | 1.19         | 1.09 | 0.02 | Pass      |      |
|               |                                           | 3.01~6.00GHz                                                                             | 1.60 Max                                                        |           |      | 1.22           | 1.31         | 1.16 | 0.04 | Pass      |      |
|               |                                           | 6.01~9.00GHz                                                                             | 1.90 Max                                                        |           |      | 1.56           | 1.65         | 1.49 | 0.05 | Pass      |      |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | φ1.37 MHF I-0 CABLE137-7 +SMA(J) 100mm    | 0.1~3.00GHz                                                                              | 1.40 Max                                                        | 5         | -    | 1.07           | 1.11         | 1.04 | 0.02 | Pass      |      |
|               |                                           | 3.01~6.00GHz                                                                             | 1.60 Max                                                        |           |      | 1.23           | 1.28         | 1.19 | 0.03 | Pass      |      |
|               |                                           | 6.01~9.00GHz                                                                             | 1.90 Max                                                        |           |      | 1.50           | 1.67         | 1.41 | 0.09 | Pass      |      |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | φ1.13 MHF SW23-0 CABLE137-7 +SMA(J) 100mm | 0.1~3.00GHz                                                                              | 1.50 Max                                                        | 5         | -    | 1.27           | 1.31         | 1.21 | 0.03 | Pass      |      |
|               |                                           | 3.01~6.00GHz                                                                             | 1.60 Max                                                        |           |      | 1.32           | 1.40         | 1.26 | 0.03 | Pass      |      |
|               |                                           | 6.01~9.00GHz                                                                             | 2.00 Max                                                        |           |      | 1.49           | 1.61         | 1.41 | 0.06 | Pass      |      |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
| D             | Durability                                |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | φ1.13                                     | Contact resistance of main contact                                                       |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | Initial                                                                                  | 3mΩ MAX.                                                        | 5         | mΩ   | 1.07           | 1.55         | 0.64 | 0.37 | Pass      |      |
|               |                                           | After testing                                                                            | 3mΩ MAX.                                                        |           |      | 1.29           | 1.71         | 0.70 | 0.37 | Pass      |      |
|               |                                           | Contact resistance of ground contact                                                     |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | Initial                                                                                  | 2mΩ MAX.                                                        | 5         | mΩ   | 0.68           | 1.06         | 0.37 | 0.27 | Pass      |      |
|               |                                           | After testing                                                                            | 2mΩ MAX.                                                        |           |      | 0.81           | 1.11         | 0.41 | 0.33 | Pass      |      |
|               | φ1.37                                     | Appearance                                                                               |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | Initial                                                                                  | No abnormality adversely affecting the performance shall occur. | 5         | -    | No abnormality |              |      |      | Pass      |      |
|               |                                           | After testing                                                                            |                                                                 |           |      | No abnormality |              |      |      | Pass      |      |
|               |                                           | Contact resistance of main contact                                                       |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | Initial                                                                                  | 3mΩ MAX.                                                        | 5         | mΩ   | 0.55           | 0.78         | 0.21 | 0.22 | Pass      |      |
|               |                                           | After testing                                                                            | 3mΩ MAX.                                                        |           |      | 0.81           | 1.27         | 0.47 | 0.35 | Pass      |      |
|               | Contact resistance of ground contact      |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |
|               | Initial                                   | 2mΩ MAX.                                                                                 | 5                                                               | mΩ        | 0.22 | 0.46           | 0.09         | 0.15 | Pass |           |      |
|               | After testing                             | 2mΩ MAX.                                                                                 |                                                                 |           | 0.28 | 0.57           | 0.17         | 0.17 | Pass |           |      |
|               | φ1.13                                     | Appearance                                                                               |                                                                 |           |      |                |              |      |      |           |      |
|               |                                           | Initial                                                                                  | No abnormality adversely affecting the performance shall occur. | 5         | -    | No abnormality |              |      |      | Pass      |      |
| After testing |                                           | No abnormality                                                                           |                                                                 |           |      | Pass           |              |      |      |           |      |
|               |                                           |                                                                                          |                                                                 |           |      |                |              |      |      |           |      |

Table 2-2 Test Result

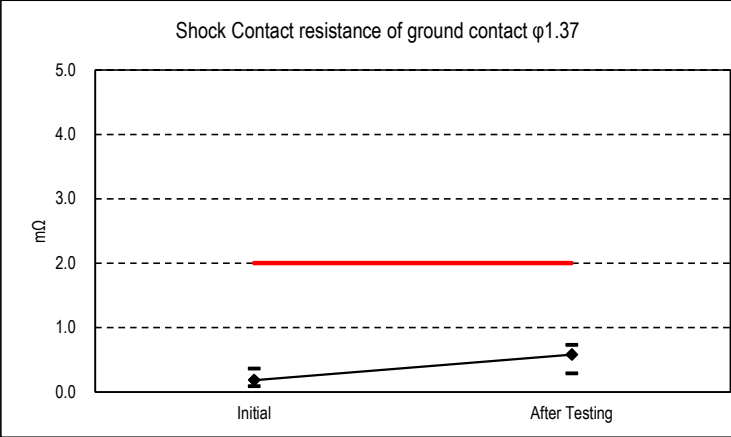
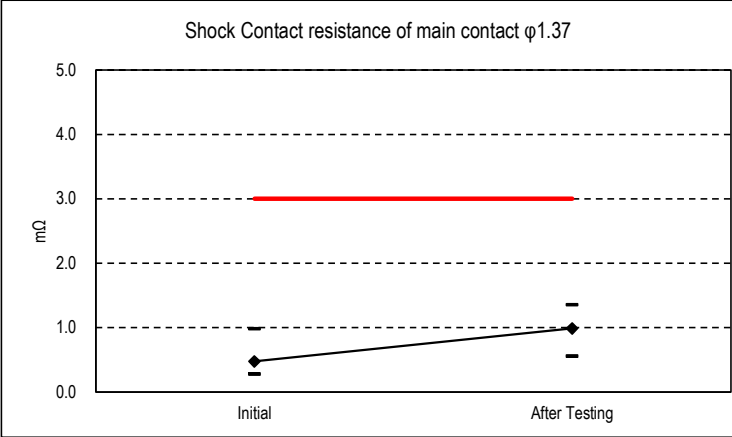
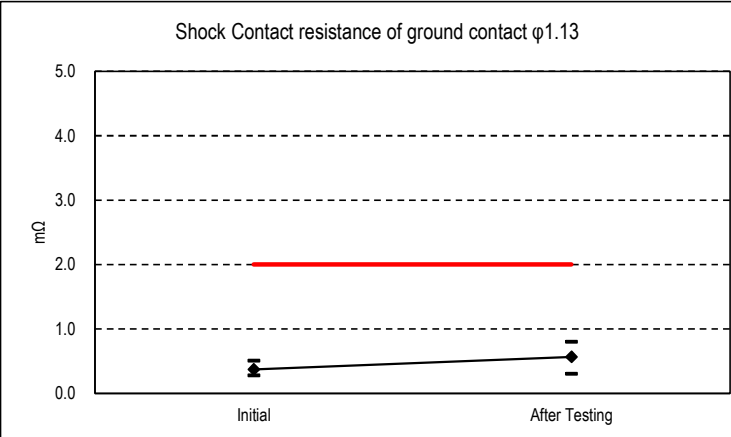
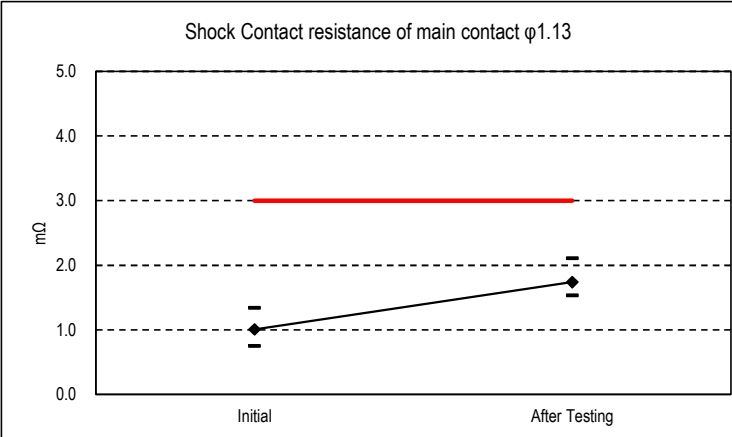
| Group | Test items                           | Measurements                                                   | Specification                                                   | N | Unit | AVE.           | MAX.  | MIN.  | S    | Judgement |
|-------|--------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------|---|------|----------------|-------|-------|------|-----------|
| E     | Shock                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | φ1.13                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | Contact resistance of main contact   |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 3mΩ MAX.                                                        | 5 | mΩ   | 1.01           | 1.34  | 0.75  | 0.24 | Pass      |
|       |                                      | After testing                                                  | 3mΩ MAX.                                                        |   |      | 1.74           | 2.11  | 1.53  | 0.22 | Pass      |
|       | Contact resistance of ground contact |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 2mΩ MAX.                                                        | 5 | mΩ   | 0.37           | 0.51  | 0.28  | 0.11 | Pass      |
|       |                                      | After testing                                                  | 2mΩ MAX.                                                        |   |      | 0.57           | 0.80  | 0.30  | 0.19 | Pass      |
|       | Electrical discontinuity             |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Spec.No electrical discontinuity greater than 1μs shall occur. |                                                                 |   |      |                |       |       |      |           |
|       |                                      | under test                                                     | -                                                               | 5 | -    | No abnormality |       |       |      | Pass      |
|       | Appearance                           |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | No abnormality adversely affecting the performance shall occur. | 5 | -    | No abnormality |       |       |      | Pass      |
|       |                                      | After testing                                                  |                                                                 |   |      | No abnormality |       |       |      | Pass      |
|       | φ1.37                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | Contact resistance of main contact   |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 3mΩ MAX.                                                        | 5 | mΩ   | 0.47           | 0.98  | 0.28  | 0.30 | Pass      |
|       |                                      | After testing                                                  | 3mΩ MAX.                                                        |   |      | 0.99           | 1.35  | 0.56  | 0.30 | Pass      |
|       | Contact resistance of ground contact |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 2mΩ MAX.                                                        | 5 | mΩ   | 0.19           | 0.36  | 0.09  | 0.11 | Pass      |
|       |                                      | After testing                                                  | 2mΩ MAX.                                                        |   |      | 0.58           | 0.73  | 0.29  | 0.18 | Pass      |
|       | Electrical discontinuity             |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Spec.No electrical discontinuity greater than 1μs shall occur. |                                                                 |   |      |                |       |       |      |           |
|       |                                      | under test                                                     | -                                                               | 5 | -    | No abnormality |       |       |      | Pass      |
|       | Appearance                           |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | No abnormality adversely affecting the performance shall occur. | 5 | -    | No abnormality |       |       |      | Pass      |
|       |                                      | After testing                                                  |                                                                 |   |      | No abnormality |       |       |      | Pass      |
| F     | Cable retention force                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | φ1.13                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 20N Min                                                         | 5 | N    | 51.94          | 55.00 | 48.90 | 2.60 | Pass      |
|       | φ1.37                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 20N Min                                                         | 5 | N    | 56.04          | 59.10 | 48.70 | 4.45 | Pass      |
| G     | Saltwater spray                      |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | φ1.13                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | Contact resistance of main contact   |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 3mΩ MAX.                                                        | 5 | mΩ   | 1.07           | 1.51  | 0.64  | 0.36 | Pass      |
|       |                                      | After testing                                                  | 3mΩ MAX.                                                        |   |      | 1.52           | 2.05  | 1.22  | 0.33 | Pass      |
|       | Contact resistance of ground contact |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 2mΩ MAX.                                                        | 5 | mΩ   | 0.26           | 0.43  | 0.18  | 0.11 | Pass      |
|       |                                      | After testing                                                  | 2mΩ MAX.                                                        |   |      | 0.61           | 0.87  | 0.47  | 0.18 | Pass      |
|       | Appearance                           |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | No abnormality adversely affecting the performance shall occur. | 5 | -    | No abnormality |       |       |      | Pass      |
|       |                                      | After testing                                                  |                                                                 |   |      | No abnormality |       |       |      | Pass      |
|       | φ1.37                                |                                                                |                                                                 |   |      |                |       |       |      |           |
|       | Contact resistance of main contact   |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 3mΩ MAX.                                                        | 5 | mΩ   | 0.43           | 0.58  | 0.25  | 0.15 | Pass      |
|       |                                      | After testing                                                  | 3mΩ MAX.                                                        |   |      | 0.85           | 1.31  | 0.46  | 0.31 | Pass      |
|       | Contact resistance of ground contact |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | 2mΩ MAX.                                                        | 5 | mΩ   | 0.26           | 0.47  | 0.13  | 0.14 | Pass      |
|       |                                      | After testing                                                  | 2mΩ MAX.                                                        |   |      | 0.39           | 0.58  | 0.19  | 0.17 | Pass      |
|       | Appearance                           |                                                                |                                                                 |   |      |                |       |       |      |           |
|       |                                      | Initial                                                        | No abnormality adversely affecting the performance shall occur. | 5 | -    | No abnormality |       |       |      | Pass      |
|       |                                      | After testing                                                  |                                                                 |   |      | No abnormality |       |       |      | Pass      |



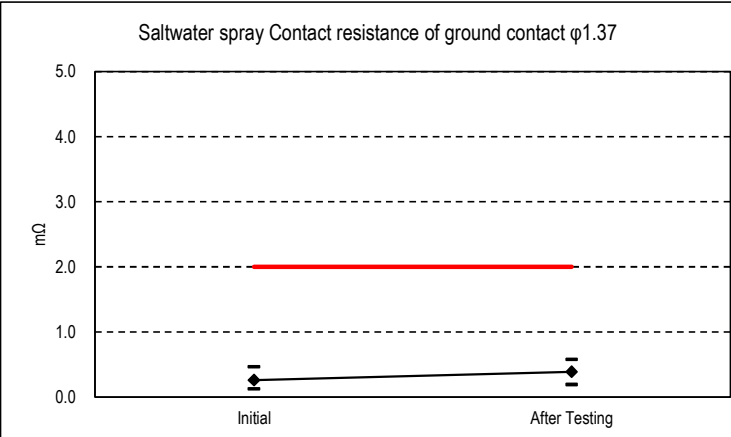
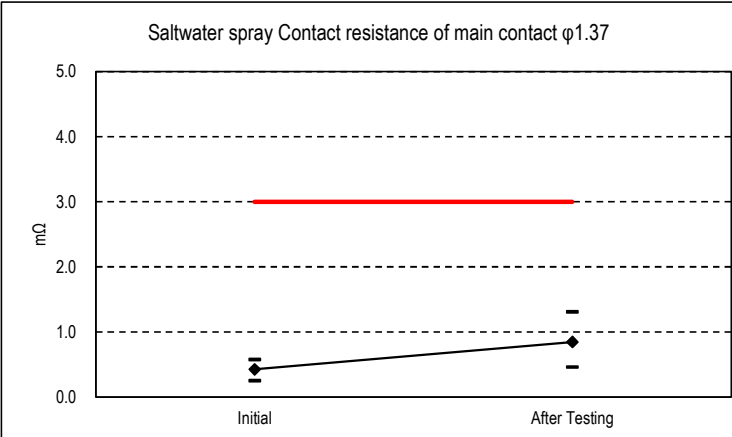
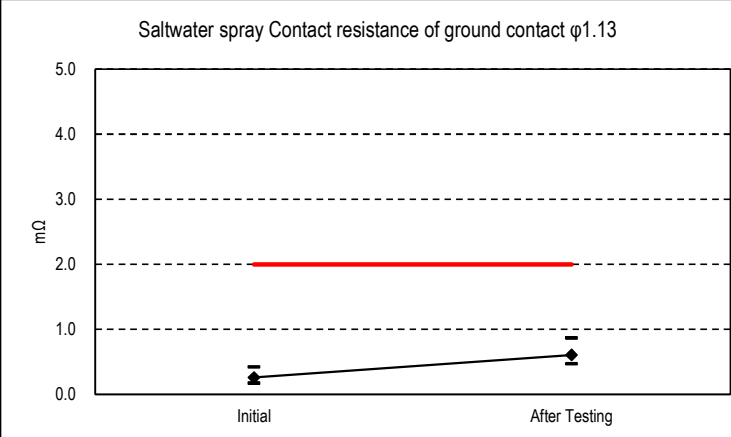
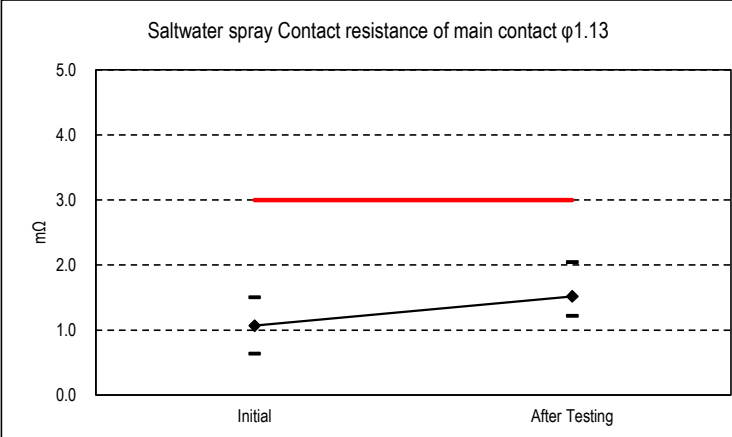
Graph 1 VSWR



Graph 2 Durability



Graph 3 Shock



Graph 3 Saltwater spray