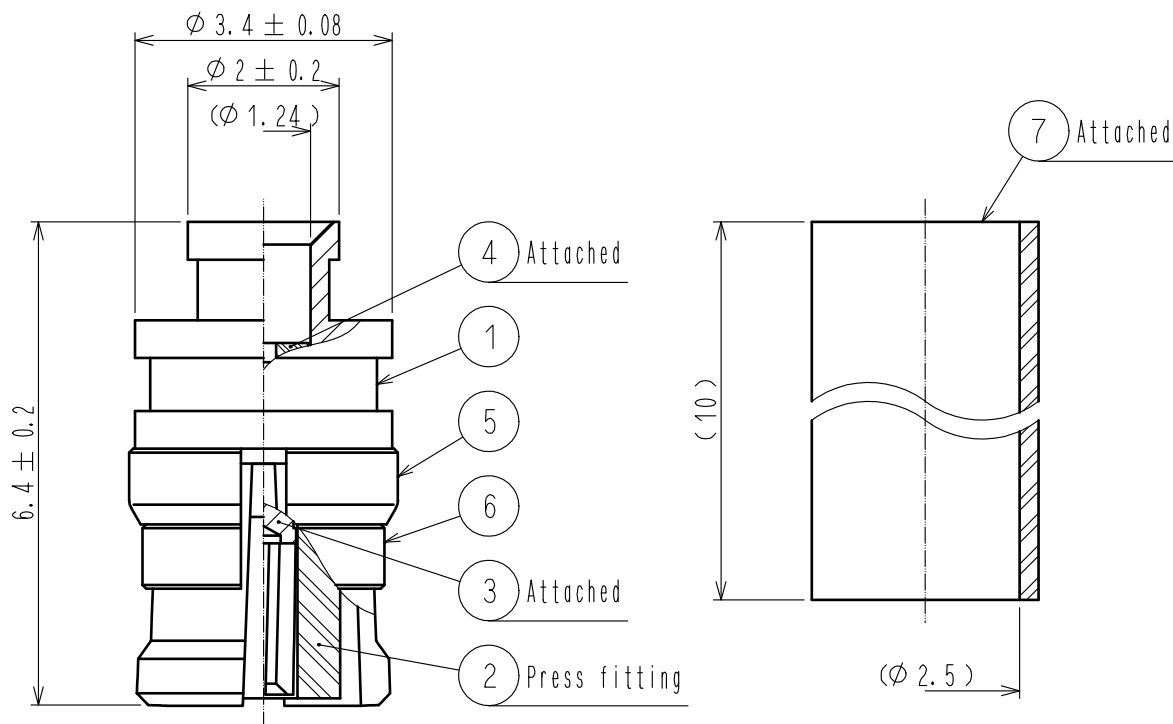


|                                                 |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------|
| Applicable standard                             |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| Rating                                          | Operating temperature range                                                                                                                  | -55 °C to +125 °C ( 95 %RH Max.)      | Storage temperature range                                                                                                                                      | -40 °C to +50 °C ( 95 %RH Max.)                        |          |
|                                                 | Power                                                                                                                                        | -- W                                  | Characteristic impedance                                                                                                                                       | 50 Ω ( 0 to 18 GHz)                                    |          |
|                                                 | Peculiarity                                                                                                                                  | ----                                  | Applicable cable                                                                                                                                               | 0.047 inch semi-flexible cable<br>(Recommend : FCCAF2) |          |
| SPECIFICATIONS                                  |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| ITEM                                            |                                                                                                                                              | TEST METHOD                           |                                                                                                                                                                | REQUIREMENTS                                           | QT AT    |
| CONSTRUCTION                                    |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| General examination                             |                                                                                                                                              | Visually and by measuring instrument. |                                                                                                                                                                | According to drawing.                                  | X X      |
| Marking                                         |                                                                                                                                              | Confirmed visually.                   |                                                                                                                                                                |                                                        | — —      |
| ELECTRICAL CHARACTERISTICS                      |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| Contact resistance                              | 100 mA Max.(DC or 1000 Hz)                                                                                                                   |                                       | Center contact 6 mΩ Max.                                                                                                                                       | X                                                      | X        |
|                                                 |                                                                                                                                              |                                       | Outer contact 6 mΩ Max.                                                                                                                                        | X                                                      | X        |
| Insulation resistance                           | 100 V DC.                                                                                                                                    |                                       | 1000 MΩ Min.                                                                                                                                                   | X                                                      | X        |
| Withstanding voltage                            | 100 V AC for 1 min. current leakage 2 mA Max.                                                                                                |                                       | No flashover or breakdown.                                                                                                                                     | X                                                      | X        |
| Return loss                                     | Frequency 0 to 15 GHz.                                                                                                                       |                                       | 20 dB Min.                                                                                                                                                     | X                                                      | —        |
|                                                 | Frequency 15 to 18 GHz.                                                                                                                      |                                       | 15 dB Min.                                                                                                                                                     |                                                        |          |
| Insertion loss                                  | Frequency --- to --- GHz.                                                                                                                    |                                       | --- dB Max.                                                                                                                                                    | —                                                      | —        |
| MECHANICAL CHARACTERISTICS                      |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| Contact insertion and extraction forces         | φ 0.35 <sup>0</sup> <sub>-0.005</sub> by steel gauge.                                                                                        |                                       | Insertion force --- N Max.                                                                                                                                     | —                                                      | —        |
|                                                 |                                                                                                                                              |                                       | Extraction force 0.2 N Min.                                                                                                                                    | X                                                      | X        |
| Insertion and extraction forces                 | Measured by applicable connector.                                                                                                            |                                       | Insertion force --- N Max.                                                                                                                                     | —                                                      | —        |
|                                                 |                                                                                                                                              |                                       | Extraction force --- N Min.                                                                                                                                    | —                                                      | —        |
| Mechanical operation                            | 500 times insertion and extractions.                                                                                                         |                                       | 1)Contact resistance:<br>Center contact 12 mΩ Max.<br>Outer contact 12 mΩ Max.                                                                                 | X                                                      | —        |
| Vibration                                       | Frequency 10 to 500 Hz single amplitude 0.75 mm,<br>98 m/s <sup>2</sup> at 10 cycles for 3 directions.                                       |                                       | 1)No electrical discontinuity of 1 μs.<br>2)No damage, crack and looseness of parts.                                                                           | X                                                      | —        |
| Shock                                           | 490 m/s <sup>2</sup> directions of pulse 11 ms<br>at 3 times for 3 directions.                                                               |                                       |                                                                                                                                                                | X                                                      | —        |
| Cable clamp strength<br>(Against cable pull)    | Using a pulling tester, pull the cable axially at a rate<br>of 30 mm/min. and record the strength at which<br>the cable or connector breaks. |                                       | 49 N Min.                                                                                                                                                      | X                                                      | —        |
| ENVIRONMENTAL CHARACTERISTICS                   |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| Damp heat                                       | Exposed at -10 to +65 °C, 90 to 98 %<br>total 10 cycles.( 240 h)                                                                             |                                       | 1)Insulation resistance: 100 MΩ Min.<br>(at high humidity)<br>2) Insulation resistance: 1000 MΩ Min.<br>(at dry)<br>3)No damage, crack and looseness of parts. | X                                                      | —        |
| Rapid change of temperature                     | Temperature -65 → - → +125 → - °C<br>Time 30 → 3 → 30 → 3 min.<br>Under 5 cycles.                                                            |                                       | No damage, crack and looseness of parts.                                                                                                                       | X                                                      | —        |
| Corrosion salt mist                             | Exposed in 5 % salt water spray for 48 h.                                                                                                    |                                       | R.L. 20 dB Min.(Frequency 0 to 15 GHz.)<br>R.L. 15 dB Min.(Frequency 15 to 18 GHz.)                                                                            | X                                                      | —        |
|                                                 |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| Count                                           | Description of revisions                                                                                                                     |                                       | Designed                                                                                                                                                       | Checked                                                | Date     |
| △                                               |                                                                                                                                              |                                       |                                                                                                                                                                |                                                        |          |
| Remark                                          |                                                                                                                                              |                                       | Approved                                                                                                                                                       | KY.SHIMIZU                                             | 16.11.04 |
| RoHS COMPLIANT                                  |                                                                                                                                              |                                       | Checked                                                                                                                                                        | KY.SHIMIZU                                             | 16.11.04 |
|                                                 |                                                                                                                                              |                                       | Designed                                                                                                                                                       | NK.OOSAWA                                              | 16.11.04 |
| Unless otherwise specified, refer to IEC 60512. |                                                                                                                                              |                                       | Drawn                                                                                                                                                          | NK.OOSAWA                                              | 16.11.04 |
| Note                                            | QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                    |                                       | Drawing No.                                                                                                                                                    | ELC-364307-00-00                                       |          |
| <b>HRS</b>                                      | SPECIFICATION SHEET                                                                                                                          |                                       | Part No.                                                                                                                                                       | SMP-J-119-18G                                          |          |
|                                                 | HIROSE ELECTRIC CO., LTD.                                                                                                                    |                                       | Code No.                                                                                                                                                       | CL338-1001-0-00                                        | △ 1/1    |



RoHS COMPLIANT

|                                      |                  |                  |               |                          |                           |                  |         |      |
|--------------------------------------|------------------|------------------|---------------|--------------------------|---------------------------|------------------|---------|------|
| 4                                    | PPS              |                  |               |                          |                           |                  |         |      |
| 3                                    | BERYLLIUM COPPER | GOLD PLATING     | 7             | POLYOLEFIN               | HEAT SHRINK TUBING(BLACK) |                  |         |      |
| 2                                    | PTFE             |                  | 6             | BERYLLIUM COPPER         | GOLD PLATING              |                  |         |      |
| 1                                    | BERYLLIUM COPPER | GOLD PLATING     | 5             | BERYLLIUM COPPER         | GOLD PLATING              |                  |         |      |
| NO.                                  | MATERIAL         | FINISH . REMARKS | NO.           | MATERIAL                 | FINISH . REMARKS          |                  |         |      |
| UNITS<br>mm                          |                  | SCALE<br>10 : 1  | COUNT<br>     | DESCRIPTION OF REVISIONS |                           | DESIGNED         | CHECKED | DATE |
| <b>HRS</b> HIROSE ELECTRIC CO., LTD. |                  | APPROVED         | · KY. SHIMIZU | 16.11.04                 | DRAWING NO.               | EDC-364307-00-00 |         |      |
|                                      |                  | CHECKED          | · KY. SHIMIZU | 16.11.04                 | PART NO.                  | SMP-J-119-18G    |         |      |
|                                      |                  | DESIGNED         | · NK. OOSAWA  | 16.11.04                 | CODE NO.                  | CL338-1001-0-00  |         |      |
|                                      |                  | DRAWN            | · NK. OOSAWA  | 16.11.04                 |                           |                  |         |      |