

|                                                                                     |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------|-----------------|----|
| Applicable standard                                                                 |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| Rating                                                                              | Operating temperature range                                                                                                         | -55 °C to +125 °C ( 95 %RH Max.)                                                                                                                                       | Storage temperature range | -55 °C to +125 °C ( 95 %RH Max.) |                 |    |
|                                                                                     | Power                                                                                                                               | -- W                                                                                                                                                                   | Characteristic impedance  | 50 Ω( 0 to 40 GHz)               |                 |    |
|                                                                                     | Peculiarity                                                                                                                         | ----                                                                                                                                                                   | Applicable cable          | ----                             |                 |    |
| SPECIFICATIONS                                                                      |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| ITEM                                                                                |                                                                                                                                     | TEST METHOD                                                                                                                                                            |                           | REQUIREMENTS                     | QT              | AT |
| CONSTRUCTION                                                                        |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| General examination                                                                 |                                                                                                                                     | Visually and by measuring instrument.                                                                                                                                  |                           | According to drawing.            | X               | X  |
| Marking                                                                             |                                                                                                                                     | Confirmed visually.                                                                                                                                                    |                           |                                  | X               | X  |
| ELECTRICAL CHARACTERISTICS                                                          |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| Contact resistance                                                                  | 100 mA Max.(DC or 1000 Hz)                                                                                                          | Center contact 8 mΩ Max.                                                                                                                                               |                           | X                                | X               |    |
|                                                                                     |                                                                                                                                     | Outer contact 4 mΩ Max.                                                                                                                                                |                           | X                                | X               |    |
| Insulation resistance                                                               | 500 V DC.                                                                                                                           | 1000 MΩ Min.                                                                                                                                                           |                           | X                                | X               |    |
| Withstanding voltage                                                                | 500 V AC for 1 min. current leakage 2 mA Max.                                                                                       | No flashover or breakdown.                                                                                                                                             |                           | X                                | X               |    |
| Voltage standing wave ratio                                                         | Frequency 0 to 18 GHz.                                                                                                              | VSWR 1.1 Max.                                                                                                                                                          |                           | X                                | X               |    |
|                                                                                     | Frequency 18 to 26.5 GHz                                                                                                            | VSWR 1.15 Max.                                                                                                                                                         |                           |                                  |                 |    |
|                                                                                     | Frequency 26.5 to 40 GHz.                                                                                                           | VSWR 1.2 Max.                                                                                                                                                          |                           |                                  |                 |    |
| Insertion loss                                                                      | Frequency 0 to 40 GHz.                                                                                                              | 0.03+0.03√f dB Max. $\triangle 3$                                                                                                                                      |                           | X                                | X               |    |
| MECHANICAL CHARACTERISTICS                                                          |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| Contact insertion and extraction forces                                             | $\phi$ 0.91 $^{+0.005}_0$ by steel gauge.                                                                                           | Insertion force --- N Max.                                                                                                                                             |                           | —                                | —               |    |
|                                                                                     |                                                                                                                                     | Extraction force 0.5 to 4.9 N                                                                                                                                          |                           | X                                | X               |    |
| Insertion and extraction forces                                                     | Measured by applicable connector.                                                                                                   | Insertion force --- N Max.                                                                                                                                             |                           | —                                | —               |    |
|                                                                                     |                                                                                                                                     | Extraction force --- N Min.                                                                                                                                            |                           | —                                | —               |    |
| Mechanical operation                                                                | 1000 times insertion and extractions.                                                                                               | 1)Contact resistance:<br>Center contact 12 mΩ Max.<br>Outer contact 8 mΩ Max.<br>2)No damage, crack and looseness of parts.                                            |                           | X                                | —               |    |
| Vibration                                                                           | Frequency 10 to 2000 Hz single amplitude 0.75 mm, 196 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                                                                               | 1960 m/s <sup>2</sup> directions of pulse 6 ms at 3 times for 6 directions.                                                         |                                                                                                                                                                        |                           | X                                | —               |    |
| Cable clamp strength (Against cable pull)                                           | Using a pulling tester, pull the cable axially at a rate of mm/min. and record the strength at which the cable or connector breaks. | N Min.                                                                                                                                                                 |                           | —                                | —               |    |
| ENVIRONMENTAL CHARACTERISTICS                                                       |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| Damp heat                                                                           | Exposed at -10 to +65 °C, 90 to 98 % total 10 cycles.( 240 h)                                                                       | 1)Insulation resistance: 100 MΩ Min. $\triangle 3$ (at high humidity)<br>2) Insulation resistance: 1000 MΩ Min. (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.                                                                                           | 1.1 Max. (Frequency 0 ~ 18 GHz.)<br>VSWR 1.15 Max.(Frequency18~26.5 GHz.)<br>1.2 Max. (Frequency 26.5~40 GHz.)                                                         |                           | X                                | —               |    |
|                                                                                     | Count                                                                                                                               | Description of revisions                                                                                                                                               | Designed                  | Checked                          | Date            |    |
| $\triangle 3$                                                                       | 2                                                                                                                                   | DIS-D-00003383                                                                                                                                                         | TK.SAWAGUCHI              | KY.SHIMIZU                       | 18.08.03        |    |
| Remark                                                                              |                                                                                                                                     |                                                                                                                                                                        | Approved                  | KY.SHIMIZU                       | 17.03.15        |    |
|                                                                                     |                                                                                                                                     |                                                                                                                                                                        | Checked                   | KY.SHIMIZU                       | 17.03.15        |    |
|                                                                                     |                                                                                                                                     |                                                                                                                                                                        | Designed                  | TY.OZAKI                         | 17.03.15        |    |
|                                                                                     |                                                                                                                                     |                                                                                                                                                                        | Drawn                     | TY.OZAKI                         | 17.03.15        |    |
| Unless otherwise specified, refer to IEC 60512.                                     |                                                                                                                                     |                                                                                                                                                                        |                           |                                  |                 |    |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                      |                                                                                                                                     |                                                                                                                                                                        | Drawing No.               | ELC-374782-00-00                 |                 |    |
|  | SPECIFICATION SHEET                                                                                                                 |                                                                                                                                                                        | Part No.                  | HK-A-JJ                          |                 |    |
|                                                                                     | HIROSE ELECTRIC CO., LTD.                                                                                                           |                                                                                                                                                                        | Code No.                  | CL338-0098-0-00                  | $\triangle$ 1/1 |    |