| APPLICABLE STANDARD | | | | |
|---|---|---|---|---|
| RATING | Operating temperature range | -40 °C to 125 °C | Storage temperature range | -10 °C to 50 °C (Packed condition) |
| | Voltage | 50 V AC / DC | Operating or storage humidity range | Relative humidity 90 % MAX (Not dewed) |
| | Current | 0.5 A | Applicable cable (FPC/FFC) | t = 0.3 ± 0.05 mm, Gold plating<br>Heat resistance : 125 °C |

# SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| General examination | Visually and by measuring instrument. | According to drawing. | × | × |
| Marking | Confirmed visually. | | × | × |
| **ELECTRICAL CHARACTERISTICS** | | | | |
| Contact resistance | 1 mA (DC or 1000 Hz). | 50 mΩ MAX.<br>Including FPC/FFC bulk resistance (L = 8 mm) | × | — |
| Insulation resistance | 100 V DC. | 500 MΩ MIN. | × | — |
| Voltage proof | 150 V AC for 1 min. | No breakdown. | × | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| Mechanical operation | 20 times insertions and extractions. | ① Contact resistance : 50 mΩ MAX.<br>② No damage, crack and looseness of parts. | × | — |
| Vibration | Frequency 10 to 55 Hz, half amplitude<br>0.75 mm, for 10 cycles in 3 axial directions. | ① No electrical discontinuity of 1 μs.<br>② Contact resistance : 50 mΩ MAX.<br>③ No damage, crack and looseness of parts. | × | — |
| Shock | 981 m/s$^2$, duration of pulse 6 ms<br>at 3 times in 3 both axial directions. | | × | — |
| FPC/FFC retention force | Measured by applicable FPC/FFC.<br>(Connector, FPC/FFC at initial condition.<br>Thickness of FPC/FFC shall be t = 0.30 mm) | Direction of insertion : 0.4 × n N MIN.<br>(n : Number of contacts)<br>(***note 1***) | × | — |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| Rapid change of temperature | Temperature -55→+15 to +35→+125→+15 to +35 °C<br>Time 30→ 2 to 3 → 30 → 2 to 3 min.<br>Under 1000 cycles. | ① Contact resistance : 50 mΩ MAX.<br>② Insulation resistance : 50 MΩ MIN.<br>③ No damage, crack and looseness of parts. | × | — |
| ⚠1 High temperature and high humidity | Exposed at 60 ± 2 °C,<br>Relative humidity 90 to 95 %, 1000 h. | | × | — |
| Damp heat, cyclic | Exposed at -10 to +65 °C,<br>Relative humidity 90 to 96 %,<br>10 cycles, Total 240 h. | ① Contact resistance : 50 mΩ MAX.<br>② Insulation resistance : 1 MΩ MIN.<br>(At high humidity)<br>③ Insulation resistance : 50 MΩ MIN.<br>(At dry)<br>④ No damage, crack and looseness of parts. | × | — |
| Dry heat | Exposed at 125 ± 2 °C, 1000 h. | ① Contact resistance : 50 mΩ MAX.<br>② No damage, crack and looseness of parts. | × | — |
| Cold | Exposed at -55 ± 3 °C, 1000 h. | | × | — |
| Sulphur dioxide [JIS C 60068-2-42] | Exposed at 40 ± 2 °C, Relative humidity 80 ± 5 %,<br>25 ± 5 ppm for 96 h. | Contact resistance : 50 mΩ MAX. | × | — |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| ⚠1 | 1 | DIS-F-00020312 | YT. NINOMIYA | HS. HIRAHARA | 20240405 |

REMARK

Unless otherwise specified, refer to IEC 60512.

| | | |
|---|---|---|
| APPROVED | KN. SHIBUYA | 20211007 |
| CHECKED | HH. MURAKAMI | 20211006 |
| DESIGNED | YT. NINOMIYA | 20211006 |
| DRAWN | YT. NINOMIYA | 20211006 |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-391183-01-00

| | | | | |
|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | FH75-**S-0.5SH(01) | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL580 | ⚠1 1/2 |

FORM HD0011-2-1

# SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| Resistance to soldering heat | 1) Reflow soldering (To be 2 times MAX.)<br>Peak TMP. 250 °C MAX.<br>Reflow TMP. over 230 °C within 60 sec.<br>Pre-heating. 150 to 200 °C 90 to 120 sec.<br>2) Soldering irons : 400 ± 10 °C, for 5 ± 1 sec. | No deformation of case of excessive looseness of the terminals. | × | — |
| Solderability | Soldered at solder temperature,<br>245 ± 3 °C for immersion duration, 3 ± 0.3 sec. | A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed. | × | — |

(***note 1***)

There's a case which FPC/FFC retention force doesn't fulfill the value,

because FPC/FFC specification affects the result of FPC/FFC retention force.