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| APPLICABLE STANDARD | | | | |
| RATING | OPERATING TEMPERATURE RANGE | Δ -40 °C TO 105 °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 (note) | APPLICABLE CABLE | t=0.3±0.05mm, GOLD PLATING |

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 | AC 20 mV MAX (1 KHz) , 1 mA . | 50 mΩ MAX. INCLUDING FPC, FFC BULK RESISTANCE (L=8mm) | X | X |
| INSULATION RESISTANCE | 100 V DC. | 500 MΩ MIN. | X | X |
| VOLTAGE PROOF | 150 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | X | X |

MECHANICAL CHARACTERISTICS

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| MECHANICAL OPERATION | 20 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| VIBRATION | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, - m/s ² FOR 10 CYCLES IN 3 AXIAL DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② CONTACT RESISTANCE: 50 mΩ MAX. | X | - |
| SHOCK | 981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 BOTH AXIAL DIRECTIONS. | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| FPC RETENTION FORCE | MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.) | DIRECTION OF INSERTION: 0.4N × n MIN. (n:NUMBER OF CONTACTS) | X | - |

ENVIRONMENTAL CHARACTERISTICS

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|--------------------------------------|--|---|---|---|
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-40→+15to+35→+105→+15to+35°C TIME 30→ 2 TO 3 → 30→ 2 TO 3 min UNDER 5 CYCLES. | ① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 50 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2°C, RELATIVE HUMIDITY 90 TO 95 %, 96 h. | | X | - |
| DAMP HEAT, CYCLIC | EXPOSED AT -10 TO +65 °C, RELATIVE HUMIDITY 90 TO 96 %, 10 CYCLES, TOTAL 240 h. | ① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 1 MΩ MIN. (AT HIGH HUMIDITY) ③ INSULATION RESISTANCE: 50 MΩ MIN. (AT DRY) ④ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| DRY HEAT | EXPOSED AT 105±2 °C, 96 h. | ① CONTACT RESISTANCE: 50 mΩ MAX. | X | - |
| COLD | EXPOSED AT -40±3°C, 96 h. | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| CORROSION SALT MIST | EXPOSED AT 35±2°C , 5 % SALT WATER SPRAY FOR 96 h. | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. | X | - |
| SULPHUR DIOXIDE [JIS C 60068-2-42] | EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% , 25±5 ppm FOR 96 h. | | X | - |
| HYDROGEN SULPHIDE [JIS C 60068-2-43] | EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% , 10 TO 15 ppm FOR 96 h. | | X | - |

| COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|-------|--------------------------|-----------|--------------|------------|
| 11 | DIS-F-00000943 | RT. IKEDA | HS. SAKAMOTO | 15. 12. 24 |

| | | | |
|---|----------|--------------|------------|
| REMARK Δ Unless otherwise specified, refer to IEC 60512. | APPROVED | MO. ISHIDA | 05. 01. 05 |
| | CHECKED | RI. TAKAYASU | 05. 01. 05 |
| | DESIGNED | HH. TSUKUMO | 05. 01. 05 |
| | DRAWN | HH. TSUKUMO | 05. 01. 05 |

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| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | DRAWING NO. | ELC4-154339-01 |
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| HRS | SPECIFICATION SHEET | PART NO. | FH28H-80S-0. 5SH (05) | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL586-1805-3-05 | Δ 1/2 |

SPECIFICATIONS



| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|------------------------------|---|--|----|----|
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING (MAX 2 CYCLES) PEAK TMP. 250 °C MAX . REFLOW TMP. OVER 230 °C WITHIN 60 sec. PRE-HEAT 150 TO 200°C FOR 90 TO 120 sec. 2) SOLDERING IRONS : TMP. 350±10°C FOR 5±1 sec . | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | x | — |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 235±5 °C FOR IMMERSION DURATION, 2±0.5 sec. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | x | — |

(note)

WHEN THE SAME VALUE OF CURRENT ARE APPLID TO ALL CONTACTS AT THE SAME TIME IN ONCE, SET THE CURRENT TO THE 70 % OF THE RATED CURRENT VALUE.

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| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | | ELC4-154339-01 | |
| HRS | SPECIFICATION SHEET | | PART NO. | FH28H-80S-0. 5SH (05) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO | CL586-1805-3-05 | 2/2 |