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| APPLICABLE STANDARD | | | | | |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °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 | t=0.3±0.05mm, GOLD PLATING.(4~30 POS.) t=0.3±0.03mm, GOLD PLATING.(OVER 31 POS.) | |
| 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 |
| ELECTRIC CHARACTERISTICS | | | | | |
| VOLTAGE PROOF | 150 V AC FOR 1 min. | | NO FLASHOVER OR BREAKDOWN. | x | x |
| INSULATION RESISTANCE | 100 V DC. | | 500 MΩ MIN. | x | x |
| CONTACT RESISTANCE | AC 20 mV MAX (1 KHz) , 1 mA . | | 50 mΩ MAX. INCLUDING FPC,FFC BULK RESISTANCE (L=8mm) | x | x |
| MECHANICAL CHARACTERISTICS | | | | | |
| VIBRATION | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, — m/s ² FOR 10 CYCLES IN 3 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 DIRECTIONS. | | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — |
| MECHANICAL OPERATION | 20 TIMES INSERTIONS AND EXTRACTIONS. | | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — |
| FPC RETENSION FORCE | MEASURED BY APPLICABLE FPC. (THICKNESS OF FPC SHALL BE t=0.30mm AT INITIAL CONDITION.) | | DIRECTION OF INSERTION : 0.3N × n MIN.(4~30 POS.) 0.2N × n MIN.(OVER 31 POS.) (note 1) | x | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| CORROSION SALT MIST | EXPOSED AT 35±2 °C , 5 % SALT WATER SPRAY FOR 96 h. | | ① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. | x | — |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-55→+15TO+35→+85→+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 | — |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| | 0 | | | | |
| REMARK | | | APPROVED | MO. ISHIDA | 07.02.17 |
| | | | CHECKED | NM. NISHIMATSU | 07.02.17 |
| | | | DESIGNED | YH. KOTANI | 07.02.14 |
| Unless otherwise specified, refer to JIS C 5402. | | | DRAWN | YH. KOTANI | 07.02.14 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC4-156169-02 |
| HRS | SPECIFICATION SHEET | | PART NO. | FH33-**S-0.5SH(10) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL580 | △ 1/2 |

SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| DRY HEAT | EXPOSED AT 85±2 °C, 96 h. | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — |
| COLD | EXPOSED AT -55±3°C, 96 h. | | x | — |
| SURPHUR DIOXIDE [JIS C 0090] | EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80 ±5% 25±5 PPM FOR 96 h. | ① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ③ NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR. | x | — |
| HYDROGEN SULPHIDE [JIS C 0092] | EXPOSED AT 40±2 °C , RELATIVE HUMIDITY 80±5% , 10 TO 15 PPM FOR 96 h. | | 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 | — |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING : PEAK TMP. 250 °C MAX . REFLOW TMP. 230 °C MIN FOR 60 sec. 2) SOLDERING IRONS : TMP. 350 ± 10 °C FOR 5±1 sec . | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | x | — |

(note1)

THIS PRODUCT HAS FLIP-LOCK CONSTRUCTION. FASTEN FPC ON PCB OR SOMETHING FIXED IF FORCE IN VERTICAL DIRECTION SHALL BE PREDICTED.

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| HRS | SPECIFICATION SHEET | | PART NO. | FH33-**S-0. 5SH(10) | | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO | CL580 |  | 2/2 |