

THE DATASHEET OF FH30M-96S-0.4SHW(05)

| APPLICA | BLE STANI | DARD | | | | | | | | | |
|--|------------|--|--|-----------|--|--|----------|---------------------|------------------------------|-------------|----------|
| OPERATING TEMPERATUR | | E RANGE | E -40 °C TO 85 °C TEMP | | TEMF | LIVATORE RANGE | | | 50°C (PACKEI | COND | MON |
| RATING | VOLTAGE | | 50 V AC / D | С | HUMID | ITY RANG | | RELATIVE HUMI | RELATIVE HUMIDITY 90 % MAX (| | EWE |
| | CURRENT | | 0.3 A | | | ICABLE | CABLE | t=0.3±0.0 | 5mm, GOLD | PLATII | NG |
| | | | SPEC | IFIC/ | IOITA | NS | | | | | |
| IT | EM | | TEST METHOD | | | | RE | QUIREMENTS | | QT | A |
| CONSTR | RUCTION | • | | | | | | | | | |
| GENERAL E | XAMINATION | VISUALLY | AND BY MEASURING IN | STRUME | NT. | ACCO | RDING TO | DRAWING. | | × | > |
| MARKING | | CONFIRMED VISUALLY. | | | | 1 | | | | × | ; |
| ELECTR | IC CHARA | CTERIS | STICS | | | | | | | | |
| CONTACT RESISTANCE | | 1mA(DC OR 1000Hz). | | | | 150 mΩ MAX. INCLUDING FPC, BULK RESISTANCE | | | | × | > |
| | | | | | | (L=8mm) 500 MΩ MIN. | | | | ļ., | <u> </u> |
| INSULATION RESISTANCE | | | | | | | |) A / N I | × | <u> </u> | |
| VOLTAGE PROOF | | 150 V AC FOR 1 min. | | | | NO FLASHOVER OR BREAKDOWN. | | | | × | <u> </u> |
| | NICAL CHA | | | OTIONIC | | [a = : | | 0.077 | FO = ***** | _ | _ |
| MECHANICAL OPERATION | | 20 TIMES INSERTIONS AND EXTRACTIONS. | | | ① CONTACT RESISTANCE: 150 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | | × | _ | |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, FOR 10 CYCLES IN 3 DIRECTIONS. | | | 1 NO ELECTRICAL DISCONTINUITY OF 1 us. | | | | 1 × | - | |
| SHOCK | | 981 m/s ² , DURATION OF PULSE 6 ms AT 3 TIMES IN 3 DIRECTIONS. | | | | ② CONTACT RESISTANCE: 150 mΩ MAX. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | | × | _ |
| FPC RETENSION FORCE | | MEASURED BY APPLICABLE FPC. (CONNECTOR,FPC AT INITIAL CONDITION. THICKNESS OF FPC SHALL BE t=0.30mm) | | | DIRECTION OF INSERTION: 28.8 N MIN | | | | × | - | |
| FNVIROI | MENTAL | | SS OF FPC SHALL BE (=0. | .30mm) | | | | | | | |
| RAPID CHAI | | | ATURE-40→+15 _{TO} +35→+8 | 35→+15±c | | ① CO | NTACT RE | SISTANCE: 1 | 50 mO MAX | Τ× | Τ_ |
| TEMPERATURE | | TIME $30 \rightarrow 2 \text{ To } 3 \rightarrow 30 \rightarrow 2 \text{ To } 3 \text{ min.}$ UNDER 5 CYCLES. | | | ② INSULATION RESISTANCE: 50 M Ω MIN. ③ NO DAMAGE, CRACK AND LOOSENESS | | | | ^ | | |
| DAMP HEAT | | EXPOSED AT 40±2 °C, | | | | OF PARTS. | | | | × | 1- |
| (STEADY ST | , | RELATIVE HUMIDITY 90 TO 95 %, 96 h. | | | | Ø 00 | | 0.0741.05 | 50 0 1111/ | | _ |
| DAMP HEAT,CYCLIC | | EXPOSED AT -10 TO +65 °C, RELATIVE HUMIDITY 90 TO 96 %, 10 CYCLES,TOTAL 240 h. | | | ① CONTACT RESISTANCE: 150 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. | | | | × | | |
| DRY HEAT | | EXPOSE | SED AT 85±2 °C, 96 h. | | | ① CONTACT RESISTANCE: $150 \text{ m}\Omega$ MAX. | | | | × | - |
| COLD | | EXPOSE | SED AT -40±3°C, 96 h. | | | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | | × | - |
| CORROSION SALT MIST | | EXPOSEI FOR 96 h | POSED AT 35±2 °C 5% SALT WATER SPLAY DR 96 h. | | | ① CONTACT RESISTANCE: 150 mΩ MAX. ② NO EVIDENCE OF CORROSION WHICH | | | | × | - |
| SURPHUR DIOXIDE [JIS C 0090] | | EXPOSE | XPOSED AT 40±2 °C , RELATIVE HUMIDITY 0±5% , 25±5 PPM FOR 96 h. | | | AFFECTS TO OPERATION OF CONNECTOR. | | | | × | †- |
| HYDROGEN | SULPHIDE | EXPOSE | DAT 40±2 °C , RELATIVE F 0 TO 15 PPM FOR 96 h | | (| | . = 11 | | | × | - |
| COUN | T DE | I ESCRIPTIC | N OF REVISIONS | | DESIG | NED | | CHECK | (ED | DA | TE |
| 0 | | | | | | | T | | | | |
| REMARK | | | | | | | APPROVE | ED RI. TA | AKAYASU | 07. 10. | |
| | | | | | | CHECKED DESIGNED | | D HS. SA | HS. SAKAMOTO | | 10. 1 |
| | | | | | | | | D YS | . EBI | 07. 10. | |
| Unless otherwise specified, refer to | | | fer to JIS C 5402. | S C 5402. | | DRAWN | | MK. | MK. YASUMI 07. | | 10. 1 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | | DF | DRAWING NO. ELC4-157120 | | |)-01 | | | |
| HS. | SF | SPECIFICATION SHEET | | | PART | ART NO. | | H30M-96S-0. 4SHW (0 | |) 5) | 1 |
| HI | | OSE EL | ECTRIC CO., LTD. | | CODE | : NO. CL58 | | 80-0103-2 | 80-0103-2-05 | | 1/: |

| SPECIFICATIONS | | | | | | | | |
|----------------|--|----------------------------------|----|----|--|--|--|--|
| ITEM | TEST METHOD | REQUIREMENTS | QT | АТ | | | | |
| RESISTANCE TO | 1) REFLOW SOLDERING (TO BE 2 TIMES MAX.) | NO DEFORMATION OF CASE OF | × | _ | | | | |
| SOLDERING HEAT | PEAK TMP. 250 °C MAX | EXCESSIVE LOOSENESS OF THE | | | | | | |
| | REFLOW TMP. 230 °C MIN FOR 30 sec. | TERMINALS. | | | | | | |
| | PRE-HEATING. 150 TO 200°C | | | | | | | |
| | 90 TO 120 sec. | | | | | | | |
| | 2)SOLDERING IRONS : 350 ± 10 °C, | | | | | | | |
| | FOR 5±1 sec. | | | | | | | |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, | A NEW UNIFORM COATING OF SOLDER | × | | | | | |
| | 235±5 ℃ FOR IMMERSION DURATION, 2±0.5 | SHALL COVER A MINIMUM OF 95 % OF | | | | | | |
| | sec. | THE SURFACE BEING IMMERSED. | | | | | | |

| Note QT:Q | ualification Test AT:Assurance Test X:Applicable Test | DRAWIN | IG NO. | ELC4-157120-01 | | |
|-----------|---|----------|-----------------------|----------------|---|-----|
| HRS | SPECIFICATION SHEET | PART NO. | FH30M-96S-0. 4SHW(05) | | | |
| 110 | HIROSE ELECTRIC CO., LTD. | CODE NO | CL580 | -0103-2-05 | Δ | 2/2 |