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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

| APPLICABLE STANDARD | | | | |
|---|---|---|---|---|
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C (1) | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C (2) |
| | VOLTAGE | 100 V AC | STORAGE HUMIDITY RANGE | 40 % TO 70 % (2) |
| | CURRENT | 0.5 A (SIGNAL CONTACT) (3)<br>3 A (MF CONTACT) | OPERATING HUMIDITY RANGE | RELATIVE HUMIDITY 85% max<br>(NOT DEWED) |

## SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × |
| MARKING | CONFIRMED VISUALLY. | | × | × |
| **ELECTRIC CHARACTERISTICS** | | | | |
| CONTACT RESISTANCE | 100 mA(DC OR 1000Hz) | SIGNAL CONTACT : 90 mΩ MAX.<br>MF CONTACT : 30 mΩ MAX. | × | — |
| INSULATION RESISTANCE | 250 V DC. | 1000 MΩ MIN. | × | — |
| VOLTAGE PROOF | 300 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | × | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | INSERTION FORCE: 30 N MAX.<br>WITHDRAWAL FORCE: 3 N MIN. | × | — |
| MECHANICAL OPERATION | 500 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE:<br>SIGNAL CONTACT : 100 mΩ MAX.<br>MF CONTACT : 40 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| VIBRATION | FREQUENCY 10 TO 55 TO 10Hz, APPROX 5min<br>SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES<br>FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| SHOCK | 490 m/s$^2$, DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS. | | × | — |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h. | ① CONTACT RESISTANCE:<br>SIGNAL CONTACT : 100 mΩ MAX.<br>MF CONTACT : 40 mΩ MAX.<br>② INSULATION RESISTANCE<br>:1000 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55 → +85 °C<br>TIME 30 → 30 min.<br>UNDER 5 CYCLES.<br>(RELOCATION TIME TO CHAMBER:WITHIN 2～3 MIN) | | × | — |
| SULFUR DIOXIDE | EXPOSED AT 25±2℃, 75±5%RH, 25 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 60068) | NO HEAVY CORROSION. | × | — |
| RESISTANCE TO SOLDERING HEAT | 1)REFLOW SOLDERING :<br>PEAK TMP : 260℃MAX<br>REFLOW TMP: 220℃MIN FOR 60sec<br>2) SOLDERING IRONS : 360℃ MAX. FOR 5 sec. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL. | × | — |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE<br>240±3℃ FOR IMMERSION DURATION, 3 sec. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | — |
| | | | | |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| △0 | | | | | |

REMARKS (1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.
(2) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.
(3) THE RATED CURRENT APPLIES TO PER CONTACT.

Unless otherwise specified, refer to JIS-C-5402.

| | | |
|---|---|---|
| APPROVED | HS. OKAWA | 09. 10. 13 |
| CHECKED | KI. HIROKAWA | 09. 10. 13 |
| DESIGNED | TH. SANO | 09. 10. 13 |
| DRAWN | KI. HIROKAWA | 09. 09. 14 |

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

DRAWING NO. ELC4-159074-00

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|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | FX18-40P-0.8SH | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL579-0002-5-00 △0 | 1/1 |

FORM HD0011-2-1