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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 | 30 V AC | OPERATING HUMIDITY RANGE | 95 % RH MAX. | | |
| | CURRENT | 0.3 A | (NO DEW CONDENSATION IS PERMITTED) | | | |
| 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 | | | | | | |
| CONTACT RESISTANCE | 100 mA (DC OR 1000 Hz). | | 100 mΩ MAX. | x | | |
| INSULATION RESISTANCE | 100 V DC | | 50 MΩ MIN. | x | | |
| VOLTAGE PROOF | 100 V AC FOR 1 min. | | NO FLASHOVER OR BREAKDOWN. | x | | |
| MECHANICAL CHARACTERISTICS | | | | | | |
| INSERTION AND WITHDRAWAL FORCE | MEASURED BY APPLICABLE CONNECTOR. | | PIN | INSERTION FORCE (MAX) | WITHDRAWAL FORCE (MIN) | x |
|  | | | 24 | 49.6N | 4.96 N | |
| | | | 40 | 56 N | 5.6 N | |
| | | | 60 | 64 N | 6.4 N | |
| MECHANICAL OPERATION | 30 TIMES INSERTIONS AND EXTRACTIONS. | | ① CONTACT RESISTANCE: 120 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | x | |
| VIBRATION | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES IN 3 AXIAL DIRECTIONS. | | ① NO ELECTRICAL DISCONTINUITY OF 1 μs MIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | x | |
| SHOCK | 490 m/s ² , DURATION OF PULSE 11 ms FOR 3 TIMES IN 3 BOTH AXIAL DIRECTIONS. | | | | x | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 hrs. | | ① CONTACT RESISTANCE: 120 mΩ MAX. ② INSULATION RESISTANCE: 25 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | x | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→+15~+35→+85→+15~+35°C TIME 30 → 2~3 → 30 → 2~3 min. 5 CYCLES. | | ① CONTACT RESISTANCE: 120 mΩ MAX. ② INSULATION RESISTANCE: 50 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | x | |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 hrs. | | NO HEAVY CORROSION. | | x | |
| SULPHUR DIOXIDE | EXPOSED IN 25 PPM FOR 96 hrs. (TEST STANDARD: JIS C 0090) | | | | x | |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING : 250 °C MAX, : 220 °C MIN, FOR 60 sec. 2) SOLDERING IRONS : 360 °C, FOR 5 sec. | | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | | x | |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 240°C, FOR IMMERSION DURATION, 3 sec. | | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95% OF THE SURFACE BEING IMMERSED. | | x | |
| | | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE | |
|  | 2 | DIS-F-006120 | TS. 00N0 | HT. YAMAGUCHI | 12. 03. 26 | |
| REMARK ⁽¹⁾ TEMPERATURE RISE INCLUDED WHEN ENERGIZED. ⁽²⁾ THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. | | | APPROVED | HS. OKAWA | 06. 04. 11 | |
| | | | CHECKED | HT. YAMAGUCHI | 06. 04. 11 | |
| | | | DESIGNED | TH. NODA | 06. 04. 10 | |
| Unless otherwise specified, refer to JIS C 5402. | | | DRAWN | TH. NODA | 06. 04. 10 | |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC4-156244-00 | | |
|  | SPECIFICATION SHEET | | PART NO. | FX12B-*P-0. 4SV | | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. |  1/1 | | |