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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 | STORAGE TEMPERATURE RANGE | -40 °C TO 60 °C ⁽¹⁾ | |
| | VOLTAGE | 50 V AC | OPERATING HUMIDITY RANGE | RELATIVE HUMIDITY 95 % RH MAX. ⁽²⁾ | |
| | STORAGE HUMIDITY RANGE | 40 % TO 70 % ⁽¹⁾ | | | |
| | CURRENT | REFER TO FX10-168pin DERATING CURVES FROM TEST REPORTS TR570E-20588 | | | |
| SPECIFICATIONS | | | | | |
| ITEM | TEST METHOD | | REQUIREMENTS | QT | AT |
| CONSTRUCTION | | | | | |
| GENERAL EXAMINATION | VISUAL AND WITH MEASURING INSTRUMENT. | | ACCORDING TO DRAWING. | x | x |
| MARKING | CONFIRM VISUALLY. | | | x | x |
| ELECTRIC CHARACTERISTICS | | | | | |
| CONTACT RESISTANCE [EIA-364-23] | 100 mA and 20 mv OPEN CIRCUIT MAX. | | 60 mΩ MAX. | x | — |
| INSULATION RESISTANCE [EIA-364-21] | 100 V DC. | | 100 MΩ MIN. | x | — |
| VOLTAGE PROOF [EIA-364-20] | 150 V AC FOR 1 MINUTE. | | NO FLASHOVER OR BREAKDOWN. | x | x |
| MECHANICAL CHARACTERISTICS | | | | | |
| INSERTION AND WITHDRAWAL FORCES [EIA-364-13] | MEASURED BY APPLICABLE CONNECTORS. | | INSERTION FORCE: 100.8 N MAX. WITHDRAWAL FORCE: 4.2 N MIN. | x | — |
| MECHANICAL OPERATION [EIA-364-09] | 50 TIMES INSERTIONS AND EXTRACTION. | | ① CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | — |
| RANDOM VIBRATION [EIA-364-28] | FREQUENCY: 20 TO 500 Hz POWER SPECTRAL DENSITY: 0.02 G ² /Hz OVERALL rms G: 3.1 Grms FOR 15 MINUTES IN THREE DIRECTIONS. | | 1) NO ELECTRICAL DISCONTINUITY OF 1μs OR MORE. 2) NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | x | — |
| SHOCK [EIA-364-27] | 490 m/s ² , DURATION OF PULSE: 11 ms 3 EACH DIRECTION, 3 AXIS. | | | x | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| THERMAL SHOCK [EIA-364-32] | TEMPERATURE: -55 → 15 ~ 35 → 85 → 15 ~ 35 °C TIME: 30 → 5 → 30 → 5 min. UNDER 10 CYCLES | | 1) CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS 2) NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | x | — |
| CYCLIC TEMPERATURE AND HUMIDITY [EIA-364-31] | @ 25 °C, 80% RH: 60 MIN DWELL TIME 30 MIN RAMP TIME @ 65 °C, 50% RH: 60 MIN DWELL TIME UNDER 24 CYCLES. | | | x | — |
| DRY HEAT [EIA-364-17] | EXPOSED AT 105 °C, 1000 hr. | | | x | — |
| MIXED FLOWING GAS [EIA-364-65] | EXPOSED AT 30 °C, 70% Cl ₂ : 10 ppb, NO ₂ : 200 ppb, H ₂ S : 10 ppb, SO ₂ : 100 ppb UNMATED 7 DAYS, MATED 7 DAYS. | | 1) CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS 2) NO HEAVY CORROSION. | x | — |
| REFLOW TEMPERATURE CONDITION [IPC / JEDEC J-STD-020C] | REFLOW PEAK TEMPERATURE : 260 °C AT CONNETOR SURFACE. | | | x | — |
| | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| | | | | | |
| REMARK ⁽¹⁾ THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. ⁽²⁾ NO DEW CONDENSATION IS PERMITTED. | | | APPROVED | HS. OKAWA | 11. 03. 24 |
| | | | CHECKED | KI. HIROKAWA | 11. 03. 24 |
| | | | DESIGNED | DK. AIMOTO | 11. 03. 23 |
| | | | DRAWN | DK. AIMOTO | 11. 03. 23 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | ELC4-330883-01 | |
| | SPECIFICATION SHEET | | PART NO. | FX10A-168P-SV4 (93) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL570-0306-2-93 | 1/1 |