



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

| APPLICABLE STANDARD | | OPERATING TEMPERATURE RANGE | | STORAGE TEMPERATURE RANGE | |
|---|---|--|--------------|---|----|
| | | -55 °C TO 85 °C | | -40 °C TO 60 °C ⁽¹⁾ | |
| RATING | | VOLTAGE | | OPERATING HUMIDITY RANGE | |
| | | 50 V AC | | | |
| STORAGE HUMIDITY RANGE | | 40 % TO 70 % ⁽¹⁾ | | RELATIVE HUMIDITY 95 % RH MAX. ⁽²⁾ | |
| CURRENT | | REFER TO FX10-168pin DERATING CURVES FROM TEST REPORTS TR570E-20587 | | | |
| 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 | 100 mA and 20 mv OPEN CIRCUIT MAX. | 60 mΩ MAX. | | x | — |
| [EIA-364-23] | | | | | |
| INSULATION RESISTANCE | 100 V DC. | 100 MΩ MIN. | | x | — |
| [EIA-364-21] | | | | | |
| VOLTAGE PROOF | 150 V AC FOR 1 MINUTE. | NO FLASHOVER OR BREAKDOWN. | | x | x |
| [EIA-364-20] | | | | | |
| MECHANICAL CHARACTERISTICS | | | | | |
| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTORS. | INSERTION FORCE: | 100.8 N MAX. | x | — |
| [EIA-364-13] | | WITHDRAWAL FORCE: | 4.2 N MIN. | | |
| MECHANICAL OPERATION | 50 TIMES INSERTIONS AND EXTRACTION. | ① CONTACT RESISTANCE CHANGE: 10 mΩ OR LESS | | x | — |
| [EIA-364-09] | | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | |
| RANDOM VIBRATION | FREQUENCY: 20 TO 500 Hz POWER SPECTRAL DENSITY: 0.02 G ² /Hz OVERALL ms 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 | — |
| [EIA-364-28] | | | | | |
| SHOCK | 490 m/s ² , DURATION OF PULSE: 11 ms 3 EACH DIRECTION, 3 AXIS. | | | x | — |
| [EIA-364-27] | | | | | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| THERMAL SHOCK | 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 | — |
| [EIA-364-32] | | | | | |
| CYCLIC TEMPERATURE AND HUMIDITY | @ 25 °C, 80% RH: 60 MIN DWELL TIME 30 MIN RAMP TIME @ 65 °C, 50% RH: 60 MIN DWELL TIME UNDER 24 CYCLES. | | | x | — |
| [EIA-364-31] | | | | | |
| DRY HEAT | EXPOSED AT 105 °C, 1000 hr. | | | x | — |
| [EIA-364-17] | | | | | |
| MIXED FLOWING GAS | 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 | — |
| [EIA-364-65] | | | | | |
| REFLOW TEMPERATURE CONDITION | REFLOW PEAK TEMPERATURE: 260 °C AT CONNECTOR SURFACE. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL. | | x | — |
| [IPC / JEDEC J-STD-020C] | | | | | |
| 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. | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | | ELC4-151971-23 | |
|  | | SPECIFICATION SHEET | | PART NO. FX10A-168P-SV1 (83) | |
| | | HIROSE ELECTRIC CO., LTD. | | CODE NO. CL570-0144-2-83 | |
| | | | |  1/1 | |