

| | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
|--|-----------------------------|---|------------------------------|---------------------|----------|---|----------|---|----------|------|------|
| ① | 8 | RE-5-2033 | Y.K.G | C.D.H | 18.10.04 | △ | | | | | |
| ② | 1 | RE-5-2988 | C.Y.H | C.D.H | 23.04.24 | △ | | | | | |
| APPLICABLE STANDARD | | | | | | | | | | | |
| RATING | OPERATING TEMPERATURE RANGE | | -40°C ~ +105°C (note1) | | | STORAGE TEMPERATURE RANGE | | -10°C ~ +50°C(Packed Condition) | | | |
| | VOLTAGE | | 50V [AC(rms) / DC] | | | OPERATING OR STORAGE HUMIDITY RANGE | | Relative Humidity 90% MAX(NOT DEWED) | | | |
| | CURRENT | | 0.5A [AC(rms) / DC] (note 2) | | | APPLICABLE CABLE | | FPC/FFC (t=0.3±0.03mm) | | | |
| SPECIFICATIONS | | | | | | | | | | | |
| ITEM | | TEST METHOD | | | | REQUIREMENTS | | | QT | AT | |
| CONSTRUCTION | | | | | | | | | | | |
| GENERAL EXAMINATION | | VISUALLY AND BY MEASURING INSTRUMENT | | | | ACCORDING TO DRAWING | | | O | O | |
| MARKING | | CONFIRMED VISUALLY | | | | | | | | | |
| ELECTRICAL CHARACTERISTICS | | | | | | | | | | | |
| CONTACT RESISTANCE | | MATE APPLICABLE FPC/FFC AND APPLY A CURRENT OF AC 20mV MAX (1KHz), 1mA. | | | | 50mΩ MAX. INCLUDING FPC/FFC BULK RESISTANCE(L=8mm) | | | O | O | |
| INSULATION RESISTANCE | | MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF DC 100V. | | | | 500MΩ MIN. | | | O | O | |
| VOLTAGE PROOF | | MATE APPLICABLE FPC/FFC AND APPLY A VOLTAGE OF AC 150V FOR 1 min. | | | | NO BREAKDOWN | | | O | O | |
| MECHANICAL CHARACTERISTICS | | | | | | | | | | | |
| MECHANICAL OPERATION | | 20 TIMES INSERTIONS AND EXTRATIONS. | | | | ① CONTACT RESISTANCE : 50mΩ MAX. ② NO DAMAGE,CRACK AND LOOSENESS OF PARTS | | | O | - | |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, HALF AMPLITUDE 0.75 mm, - m/s ² FOR 10 CYCLES IN 3 DIRECTIONS. | | | | ① NO ELECTRICAL DISCONTINUITY OF 1μs. ② CONTACT RESISTANCE : 50mΩ MAX. | | | O | - | |
| SHOCK | | 981m/s ² DIRECTION OF PULSE 6ms AT 3 TIMES IN 3 DIRECTIONS. | | | | ③ NO DAMAGE,CRACK AND LOOSENESS OF PARTS | | | O | - | |
| FPC/FFC RETENSION FORCE | | MEASURE BY APPLICABLE FPC/FFC. (THICKNESS OF FPC/FFC SHALL BE t=0.30mm AT INITIAL CONDITION.) | | | | HORIZONTAL DIRECTION : 0.3N X n MIN. (n : NUMBER OF CONTACTS). (note 3) | | | O | - | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | | | | | |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE : -40 → 15 TO 35 → +105 → 15 TO 35 °C TIME : 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES. | | | | ① CONTACT RESISTANCE : 50mΩ MAX. ② INSULATION RESISTANCE : 50MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS | | | O | - | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 40±2°C, 90~95 %, 96h. | | | | | | | O | - | |
| DAMP HEAT, CYCLE | | TEMPERATURE : -10 TO +65°C HUMIDITY : 90 TO 95% 10 CYCLE, TOTAL 240h. | | | | | | | O | - | |
| DRY HEAT | | EXPOSED AT 105±2°C, 96h. | | | | ① CONTACT RESISTANCE : 50mΩ MAX. | | | O | - | |
| COLD | | EXPOSED AT -40±3°C, 96h. | | | | ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS | | | O | - | |
| CORROSION SALT MIST | | EXPOSED AT 35±2°C, 5% SALT WATER SPRAY FOR 96h. | | | | ① CONTACT RESISTANCE : 50mΩ MAX. | | | O | - | |
| SURPHUR DIOXIDE [JIS C 0090] | | EXPOSED AT 40±2°C, RELATIVE HUMIDITY 80±5%, 25±5 PPM FOR 96h. | | | | ② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR | | | O | - | |
| HYDROGEN SULPHIDE [JIS C 0092] | | EXPOSED AT 40±2°C, RELATIVE HUMIDITY 80±5%, 10 TO 15 PPM FOR 96h. | | | | | | | O | - | |
| RESISTANCE TO SOLDERING HEAT | | 1) REFLOW SOLDERING : PEAK TMP. 250°C MAX. REFLOW TMP.230°C MIN. FOR 60 sec. 2) SOLDERING IRONS : TMP. 350±5°C FOR 5±1 sec. | | | | ① NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS ② NO DAMAGE OF ELECTRICAL PERFORMANCE | | | O | - | |
| SOLDERABILITY | | SOLDER DIPPING TEMPERATURE 245±5°C, FOR IMMERSION DURATION, 3±0.3 sec. | | | | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95% OF THE SURFACR BEING IMMERSERD. | | | O | - | |
| <p>△ (note 1) FOLLOW THE SPECIFICATIONS OF FPC/FFC IF IT'S ALLOWABLE MAXIMUM OPERATING TEMPERATURE IS BELOW 105°C</p> <p>△ (note 2) WHEN THE SAME VALUE OF CURRENT ARE APPLIED TO ALL CONTACTS AT THE SAME TIME IN ONCE, SET THE CURRENT TO THE 70% OF THE RATED CURRENT VALUE.</p> <p>△ (note 3) THERE'S A CASE WHICH FPC/FFC RETENTION FORCE DOESN'T FULFILL THE VALUE, BECAUSE FPC/FFC SPECIFICATION AFFECTS THE RESULT OF FPC/FFC RETENTION FORCE.</p> | | | | | | | | | | | |
| REMARKS | | | | | DRAWN | DESIGNED | CHECKED | APPROVED | RELEASED | | |
| | | | | | B.J KIM | B.J KIM | D.H CHO | H.C SONG | | | |
| UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402. | | | | | 18.03.02 | 18.03.02 | 18.03.02 | 18.03.02 | | | |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST | | | | | | | | | | | |
| HIROSE KOREA CO.,LTD. | | | | SPECIFICATION SHEET | | | | PART NO. TF38-**S-0.5SV(830) | | | |
| CODE NO.(OLD) | | | DRAWING NO. | | | CODE NO. | | | 1 | | |
| CL | | | ELC4-632306 | | | CL 6537-****-*-830 | | | 1 | | |