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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 | | | | | |
|--|--|----------------------------------|---|---|--------------------|
| | Operating Temperature Range | -55 °C to +105 °C ⁽¹⁾ | Storage Temperature Range | -10 °C to +60 °C ⁽²⁾ | |
| Rating | Voltage | 100 V AC | Storage Humidity Range | Relative humidity 85 % MAX (Not dewed) | |
| | Current | 0.5 A | Operating Humidity Range | | |
| 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 1000 Hz) | | 30 mΩ MAX ⁽³⁾ | × | — |
| Insulation Resistance | 250 V DC | | 1000 MΩ MIN | × | — |
| Voltage Proof | 300 V AC for 1 min. | | No flashover or breakdown. | △ ₁ | × |
| MECHANICAL CHARACTERISTICS | | | | | |
| Insertion and Withdrawal Forces | Measured by applicable connector. | | Insertion Force: 26.7 N MAX Withdrawal Force: 2.7 N MIN | × | — |
| Mechanical Operation | 100 times insertions and extractions. | | 1)Contact Resistance : 40 mΩ MAX ⁽³⁾ 2)No damage, crack and looseness of parts. | × | — |
| Vibration | Frequency 10 to 55 to 10 Hz, approx 5 min. Single amplitude: 0.75 mm, 10 cycles for 3 axial directions. | | 1)No electrical discontinuity of 1 μs. 2)No damage, crack and looseness of parts. | × | — |
| Shock | 490 m/s ² , duration of pulse 11 ms at 3 times for 3 both axial directions. | | | × | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| Damp Heat (Steady state) | Exposed at 40 ± 2 °C, 90 to 95 %, 96 h. | | 1)Contact Resistance : 40 mΩ MAX ⁽³⁾ 2)Insulation Resistance: 1000 MΩ MIN 3)No damage, crack and looseness of parts. | × | — |
| Rapid Change of Temperature | Temperature: -55 → +85 °C Time : 30 → 30 min. Under 5 cycles. (Relocation time to chamber: within 2 to 3 MIN) | | | × | — |
| Dry Heat | Exposed at +105 °C, 96 h | | 1)Contact Resistance : 40 mΩ MAX ⁽³⁾ 2)No damage, crack and looseness of parts. | × | — |
| Cold | Exposed at -55 °C, 96 h | | | × | — |
| Resistance to Soldering Heat | 1)Reflow soldering: Peak TMP: 260 °C MAX Reflow TMP: 220 °C MIN for 60 sec 2)Soldering irons: 360 °C MAX for 5 sec. | | No deformation of case of excessive looseness of the terminal. | × | — |
| Solderability | Soldered at solder temperature 240 ± 3 °C 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 |
| △ ₁ | 2 | DIS-F-00003292 | MT. ITANO | HT. YAMAGUCHI | 18. 04. 16 |
| REMARKS | | | APPROVED | NH. NAKATA | 17. 11. 01 |
| (1) Include temperature rise caused by current-carrying. | | | CHECKED | MK. NAGATA | 17. 10. 31 |
| (2) "Storage" means a long-term storage state for the unpacked part before assembly to pcb. | | | DESIGNED | KJ. NISHIWAKI | 17. 10. 31 |
| (3) Contact resistance of relay board is not included. It becomes contact resistance for 1 connector. △ ₁ | | | | DRAWN | KJ. NISHIWAKI |
| Unless otherwise specified, refer to IEC 60512. | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | ELC-376551-00-00 | |
| HRS | SPECIFICATION SHEET | | PART NO. | FX27-40S-0.8SV | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL577-1002-0-00 | △ ₁ 1/1 |