

| APPLICABLE STANDARD | | | | | |
|---|---|--------------------------------|---|--|------------|
| Rating | Operating Temperature Range | -55 °C to 85 °C ⁽¹⁾ | Storage Temperature Range | -10 °C to 60 °C ⁽²⁾ | |
| | Voltage | 50 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. | x | x |
| Marking | Confirmed visually. | | | x | x |
| ELECTRIC CHARACTERISTICS | | | | | |
| Contact Resistance | 100 mA(DC or 1000Hz) | | 70 mΩ MAX. | x | — |
| Insulation Resistance | 100 V DC. | | 100 MΩ MIN. | x | — |
| Voltage Proof | 150 V AC for 1 min. | | No flashover or breakdown. | x | x |
| MECHANICAL CHARACTERISTICS | | | | | |
| Insertion And Withdrawal Forces | Measured by applicable connector. | | Insertion Force: 28 N MAX. Withdrawal Force: 3.5 N MIN. | x | — |
| Mechanical Operation | 50 times insertions and extractions. | | ① Contact Resistance: Variation from initial value 20 mΩ or less. ② No damage, crack and looseness of parts. | x | — |
| Vibration | Frequency 10 to 55 to 10Hz, approx 5min 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. | x | — |
| Shock | 490 m/s ² , duration of pulse 11 ms at 3 times for 3 both axial directions. | | | x | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| Damp Heat (Steady state) | Exposed at 40±2 °C, 90 ~ 95 %, 96 h. | | ① Contact Resistance: Variation from initial value 20 mΩ or less. ② Insulation Resistance : 100 MΩ MIN. ③ No damage, crack and looseness of parts. | x | — |
| Rapid Change of Temperature | Temperature -55 → +85 °C Time 30 → 30 min. Under 5 cycles. (Relocation time to chamber:within 2~3 MIN) | | | x | — |
| Cold | Exposed at -55°C, 96 h | | ① Contact Resistance: Variation from initial value 20 mΩ or less. ② No damage, crack and looseness of parts. | x | — |
| Dry Heat | Exposed at 85°C, 96 h | | | x | — |
| Sulfur Dioxide | Exposed at 25±2°C, 75±5%RH, 25 PPM for 96 h. (Test standard : JIS C 60068) | | ① No defect such as corrosion which impairs the function of connector. ② Contact Resistance: variation from initial value 20 mΩ or less. | x | — |
| Resistance to Soldering Heat | 1)Reflow Soldering : Peak TMP : 260°C MAX Reflow TMP: 220°C MIN for 60sec 2) Soldering Irons : 360°C MAX. for 5 sec. | | | x | — |
| 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. | x | — |
| | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| | △ | | | | |
| REMARKS ⁽¹⁾ Include temperature rise caused by current-carrying. ⁽²⁾ "STORAGE" means a long-term storage state for the unpacked part before assembly to PCB. | | | APPROVED | HS. OKAWA | 14. 05. 29 |
| | | | CHECKED | KN. SHIBUYA | 14. 05. 29 |
| | | | DESIGNED | TS. 00NO | 14. 05. 29 |
| Unless otherwise specified, refer to JIS-C-5402. | | | DRAWN | TS. 00NO | 14. 05. 29 |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC4-348426-00 | |
| HRS | SPECIFICATION SHEET | | PART NO. | FX20-40S-0. 5SH | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL570-1601-8-00 | △ 1/1 |