

Nov.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
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 | -45°C TO +125°C (NOTES 1) | STORAGE TEMPERATURE RANGE | -10°C TO + 60°C (NOTE2) | |
| | VOLTAGE | 150V AC | APPLICABLE CONNECTOR | DF9#-*P-1V (69) | |
| | CURRENT | 0.5A | | | |
| 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 | 100m A (DC OR 1000 Hz). | | 50mΩ MAX. | X | - |
| INSULATION RESISTANCE | 100V DC. | | 500MΩ MIN. | X | - |
| VOLTAGE PROOF | 250V AC FOR 1 min. | | NO FLASHOVER OR BREAKDOWN. | X | - |
| MECHANICAL CHARACTERISTICS | | | | | |
| MECHANICAL OPERATION | 100TIMES INSERTIONS AND EXTRACTIONS. | | ① CONTACT RESISTANCE: 50mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| VIBRATION | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS. | | ① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| SHOCK | 490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | | ① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -65→ 5 TO 35→125→ 5 TO 35°C TIME 30→10 TO 15→ 30→10TO15min UNDER 5 CYCLES. | | ① CONTACT RESISTANCE: 50mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h. | | ① CONTACT RESISTANCE: 50mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | - |
| CORROSION SALT MIST | EXPOSED IN 5% SALT WATER SPRAY FOR 48 h. | | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION. | X | - |
| SULPHUR DIOXIDE | EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD:JEIDA-39) | | ① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION. | X | - |
| HEAT RESISTANCE OF SOLDERING | [RECOMMENDED TEMPERATURE PROFILE] 《SOLDERING AREA》 MAX250°C, 220°C FOR 60 SECONDS MAX. 《PREHEATING AREA》 150 TO 180°C 90~120 SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. [RECOMMENDED MANUAL SOLDELING CONDITION] SOLDERING IRON TEMPERATURE 380°C SOLDERING TIME : WITHIN 3 SECONDS. | | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | - |
| SOLDERABILITY | SOLDERING TEMPARATURE:245±5°C DURATION OF IMMERSION : SOLDERING FOR 3SECONDS | | A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMERSED. | X | - |
| REMARKS | | | | | |
| NOTE1:INCLUDING THE TEMPERATURE RISE BY CURRENT. | | | | | |
| NOTE2:STORAGEIS DEFINED AS LONG-TERM STORAGE OF UNUSED PRODUCTS. | | | | | |
| APPLY OPERATION TEMPERATURE RANGE TO PRODUCTS MOUNTED ON PCB WITHOUT POWER SUPPLY. | | | | | |
| UNLESS OTHERWISE SPECIFIED , REFER TO JIS C 5402 . | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| △ | 1 | DIS-H-001222 | AR.TAKAHASHI | TS.MIYAZAKI | 06.08.01 |
| | | | APPROVED | TY.OMA | 04.03.31 |
| | | | CHECKED | TS.MIYAZAKI | 04.03.31 |
| | | | DESIGNED | HK.UMEHARA | 04.03.31 |
| | | | DRAWN | MY.NAKAMOTO | 04.03.31 |
| Note | QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC4-162419-13 | |
| SPECIFICATION SHEET | | | PART NO. | DF9-*S-1V (69) | |
| HIROSE ELECTRIC CO., LTD. | | | CODE NO. | CL540 | △ 1/1 |