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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				
RATING	OPERATING TEMPERATURE RANGE OPERATING HUMIDITY RANGE	-35°C TO +85°C(NOTE 1) 20% TO 80%(NOTE 2)	STORAGE TEMPERATURE RANGE STORAGE HUMIDITY RANGE	-10°C TO +60°C(NOTE 3) 40% TO 70%(NOTE 2)(NOTE 3)
	VOLTAGE	100V AC / DC	APPLICABLE CONNECTOR	DF81※-40S-0.4H(##)
⚠1	CURRENT	AWG#34,36 : 0.3(MAX0.8A) AWG#40 : 0.25A AWG#42 : 0.2A AWG#44 : 0.15A AWG#46 : 0.1A (NOTE4) (NOTE5)	APPLICABLE CABLE	THIN COAXIAL CABLE : AWG#36～AWG#46 / DISCRETE CABLE : AWG#34～40(Jacket : φ0.4MAX)

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).	CONTACT:80mΩ MAX. SHIELDING:80mΩ MAX.	X	—
INSULATION RESISTANCE	100V DC.	50MΩ MIN.	X	—
VOLTAGE PROOF	250V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS				
MECHANICAL OPERATION	30 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE. SHIELDING RESISTANCE: NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, 3 DIRECTIONS ×10 CYCLE.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SHOCK	490 m/s² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		X	—
ENVIRONMENTAL CHARACTERISTICS				
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 →+85 °C TIME 30 → 30 min UNDER 5 CYCLES. (THE TRANSFERRING TIME OF THE CHAMBER IS 2-3 MINUTE.)	① CONTACT RESISTANCE: NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE. SHIELDING RESISTANCE: NO VARIATION OF 50 mΩ OR MORE FROM INITIAL VALUE. ② INSULATION RESISTANCE: 25 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.		X	—
SULFUR DIOXDE GAS	EXPOSED IN 25±5PPM , 25±2℃ , 75%RH , 96h.	NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.	X	—
RESISTANCE TO SOLDERING HEAT	①BONDING TEMPERATURE: 270°C MAX :5 sec MAX 200°C MIN :30 sec MAX ②MANUAL SOLDERING TEMPERATURE: 350°C, 3sec MAX.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 5 sec. (Sn-3.0Ag-0.5Cu)	SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠1	2	DIS-D-003000	AH. MIYAZAKI	MH. TSUCHIDA	13. 08. 29

REMARKS
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT
NOTE2: NON CONDENSING
NOTE3: THE TERM "STORAGE" REFERS TO PRODUCTS STORED FOR A LONG PERIOD PRIOR TO MOUNTING AND USE. THE OPERATING TEMPERATURE AND HUMIDITY RANGE COVERS THE NON-CONDUCTING CONDITION OF CONNECTORS AFTER BOARD MOUNTING AND THE TEMPORARY STORAGE CONDITIONS OF TRANSPORTATION, etc
⚠1 NOTE4:IT COULD BE VARIED DEPENDING ON THE CONDITIONS.
"MAX" IS RATING CURRENT AS ONLY TWO OF THEM TURN ON ELECTRICITY.
NOTE5: TEMPERATURE RISE OF CONNECTOR BODY ONLY, AND THAT OF CABLE IS NOT INCLUDED.
Unless otherwise specified, refer to JIS C 5402,IEC60512.

APPROVED	TS. SAKATA	13. 04. 16
CHECKED	TS. SAKATA	13. 04. 16
DESIGNED	TP. MATSUMOTO	13. 04. 16
DRAWN	TP. MATSUMOTO	13. 04. 16

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC4-351669-01

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. DF81D-40P-0.4SD(51)

CODE NO. CL662-8120-1-51 ⚠1

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FORM HD0011-2-1