



APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-35°C TO +85°C(NOTE 1)	STORAGE TEMPERATURE RANGE	-10°C TO +60°C(NOTE 3)	
	OPERATING HUMIDITY RANGE	20% TO 80%(NOTE 2)	STORAGE HUMIDITY RANGE	40% TO 70%(NOTE 2)(NOTE 3)	
	VOLTAGE	100V AC / DC	APPLICABLE CONNECTOR	DF81※-50S-0.4H(##)	
	CURRENT	AWG#34,36 : 0.3(MAX0.8A) AWG#40 : 0.25A AWG#42 : 0.2A AWG#44 : 0.15A AWG#46 : 0.1A	APPLICABLE CABLE THIN COAXIAL CABLE : AWG#36~AWG#46 / DISCRETE CABLE : AWG#34~40(Jacket : φ0.4MAX)	(NOTE4) (NOTE5)	
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.	X —
SHOCK		490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	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.	X —
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.		② INSULATION RESISTANCE: 25 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X —
SULFUR DIOXIDE GAS		EXPOSED IN 25±5PPM , 25±2°C , 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
<div> <div>  </div> <div> 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 NOTE4:IT COULD BE VARIED DEPENDING ON THE CONDITIONS. "MAX" IS RATING CURRENT AS ONLY TWO OF THEM TURN ON ELECTRICITY. NOTES: TEMPERATURE RISE OF CONNECTOR BODY ONLY, AND THAT OF CABLE IS NOT INCLUDED. Unless otherwise specified, refer to JIS C 5402,IEC60512. </div> </div>					
			APPROVED	MH. YAMANE	13. 11. 06
			CHECKED	MH. TSUCHIDA	13. 11. 05
			DESIGNED	AH. MIYAZAKI	13. 11. 01
			DRAWN	AH. MIYAZAKI	13. 11. 01
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-351810-02
	SPECIFICATION SHEET		PART NO.	DF81D-50P-0. 4SD (52)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL662-8122-7-52	 1/1