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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	-35°C TO +85°C(NOTES 1)	STORAGE TEMPERATURE RANGE	-10°C TO +60°C(NOTES 3)	
	OPERATING HUMIDITY RANGE	20% TO 80%(NOTES 2)	STORAGE HUMIDITY RANGE	40% TO 70%(NOTES 2)(NOTES 3)	
	VOLTAGE	50V AC / DC	APPLICABLE CONNECTOR	DF80※-50P-0.5SD(##)	
	CURRENT	0.5 A/PIN (NOTES 4)			
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	150V 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/s <sup>2</sup> 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.	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 25PPM , 25°C , 75%RH , 96h.		NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR.	X	—
RESISTANCE TO SOLDERING HEAT	①REFLOW TEMPERATURE: PEAK 250°C MAX 240°C MIN :20 sec MAX 220°C MIN :60 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
△					
REMARKS			APPROVED	MH. YAMANE	13. 08. 31
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT			DRAWN	I.O. DENPOUYA	13. 08. 30
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: TEMPERATURE RISE OF CONNECTOR BODY ONLY, AND THAT OF CASE IS NOT INCLUDED. RATED CURRENT VARIES DEPENDING ON CABLES ASSEMBLED.					
Unless otherwise specified, refer to JIS C 5402,IEC60512.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-338299-02	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	DF80-50S-0. 5V (52)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL662-8007-9-52	△ 1/1