

In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD		-35°C TO +85°C(NOTES 1)		STORAGE TEMPERATURE RANGE		-10°C TO +60°C(NOTES 3)	
RATING	OPERATING TEMPERATURE RANGE	20% TO 80%(NOTES 2)		STORAGE HUMIDITY RANGE	40% TO 70%(NOTES 2)(NOTES 3)		
	HUMIDITY RANGE						
CURRENT	VOLTAGE	50V AC / DC		APPLICABLE CONNECTOR	DF80※:50P-0.5SD(##)		
	CURRENT						
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 x 10 CYCLE.	① NO ELECTRICAL DISCONTINUITY OF 1 μs. 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.			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 DIOXIDE GAS	EXPOSED IN 25PPM, 25°C, 75%RH, 96h.	NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR. NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.		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.	SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED.		X	-		
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 5 sec. (Sn-3.0Ag-0.5Cu)			X	-		
COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE			
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: 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		
HRS	SPECIFICATION SHEET		PART NO.	DF80-50S-0.5V(52)			
	HIROSE ELECTRIC CO., LTD.		CODE NO.	QL662-8007-9-52		1/1	