



**THE DATASHEET OF
DF80D-40P-0.5SD(51)**



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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※-40S-0.5V(##)	
	CURRENT	0.5 A/PIN (NOTE4)	APPLICABLE CABLE	THIN COAXIAL CABLE (AWG#40~AWG#46) / DISCRETE CABLE (AWG#32~36)	
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 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.	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	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 IMMERSSED.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
REMARKS			APPROVED	TS. SAKATA	13. 03. 25
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT			CHECKED	TS. SAKATA	13. 03. 25
NOTE2: NON CONDENSING			DESIGNED	IO. DENPOUYA	13. 03. 25
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			DRAWN	IO. DENPOUYA	13. 03. 25
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.	ELC4-351197-01	
HRS	SPECIFICATION SHEET		PART NO.	DF80D-40P-0.5SD (51)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL662-8118-0-51	△ 1/1

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