

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

APPLICABLE STANDARD			
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)
RATING VOLTAGE	100V AC/DC	APPLICABLE CONNECTOR	DF81※:50P-0.4SD(##)
CURRENT	AWG#34,36 : 0.3(MAX0.8A)	}	(NOTE4)
	AWG#40 : 0.25A		
	AWG#42 : 0.2A		
	AWG#44 : 0.15A		
	AWG#46 : 0.1A		(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 30TIMES INSERTIONS AND EXTRACTIONS.				
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.	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	-

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.	NO DEFECT SUCH AS CORROSION WHICH IMPAIRS THE FUNCTION OF CONNECTOR. NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	-
SULFUR DIOXIDE GAS	EXPOSED IN 25±5PPM, 25±2°C, 75%RH, 96h.		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
△ 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
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.

Note	QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC4-340455-01
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SPECIFICATION SHEET		PART NO.	DF81-50S-0.4H(51)
HIROSE ELECTRIC CO., LTD.		CODE NO.	CL662-8102-0-51
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