

APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-45 °C TO +125 °C (NOTES 1)	STORAGE TEMPERATURE RANGE	-10 °C TO + 60 °C (NOTES 2)		
	VOLTAGE	50 V AC	APPLICABLE CONNECTOR	DF12#(3.0)-*DS-0.5V(81)		
	CURRENT	0.3 A		DF12#(3.0)-*DS-0.5V(86)		
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	100 m A (DC OR 1000 Hz).	50 mΩ MAX.	X	—		
INSULATION RESISTANCE	100 V DC	500 MΩ MAX	X	—		
VOLTAGE PROOF	150 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—		
MECHANICAL CHARACTERISTICS						
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	SIGNAL	INSERTION FORCE (N)MAX	WITHDRAWAL FORCE (N)MIN	X	—
		10	19.8	1.5		
		14	21.3	2.1		
		20	23.4	2.6		
		30	27.0	3.4		
		32	27.6	3.6		
		36	29.0	4.0		
		40	30.6	4.2		
		50	34.2	5.0		
		60	38.0	6.0		
80	45.0	7.4				
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—		
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS.	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 NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—		
ENVIRONMENTAL CHARACTERISTICS						
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -65 → 15 TO 35 → 125 → 15 TO 35 °C TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 500 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.	① CONTACT RESISTANCE: 50 mΩ MAX. ② INSULATION RESISTANCE: 500 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—		
CORROSION SALT MIST	EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION.	X	—		
SULPHUR DIOXIDE	EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JEIDA-39)	① CONTACT RESISTANCE: 50 mΩ MAX. ② NO HEAVY CORROSION.	X	—		
HEAT RESISTANCE OF SOLDERING	[RECOMMENDED TEMPERATURE PROFILE] 《SOLDERING AREA》 MAX250°C, 220°C FOR 60 SECONDS MAX. 《PREHEATING AREA》 150 TO 180°C 90~120 SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION. [RECOMMENDED MANUAL SOLDELING CONDITION] SOLDERING IRON TEMPERATURE 350°C SOLDERING TIME : WITHIN 3 SECONDS.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—		
REMARKS NOTE1:INCLUDING THE TEMPERATURE RISE BY CURRENT. NOTE2:STORAGE IS DEFINED AS LONG-TERM STORAGE OF UNUSED PRODUCTS. APPLY OPERATION TEMPERATURE RANGE TO PRODUCTS MOUNTED ON PCB WITHOUT POWER SUPPLY. UNLESS OTHERWISE SPECIFIED, REFER TO JIS C 5402.						
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
△						
			APPROVED	MO.NAKAMURA	06.01.30	
			CHECKED	TS.MIYAZAKI	06.01.30	
			DESIGNED	YH.MICHIDA	06.01.30	
			DRAWN	HK.MURAKAMI	06.01.27	
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-160394-09		
HRS	SPECIFICATION SHEET		PART NO.	DF12E(3.0)-*DP-0.5V(81)		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL537	△ 1/1	