

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.		<table border="1"> <thead> <tr> <th>SIGNAL</th> <th>INSERTION FORCE (N) MAX</th> <th>WITHDRAWAL FORCE (N) MIN</th> </tr> </thead> <tbody> <tr><td>10</td><td>19.8</td><td>1.5</td></tr> <tr><td>14</td><td>21.3</td><td>2.1</td></tr> <tr><td>20</td><td>23.4</td><td>2.6</td></tr> <tr><td>30</td><td>27.0</td><td>3.4</td></tr> <tr><td>32</td><td>27.6</td><td>3.6</td></tr> <tr><td>36</td><td>29.0</td><td>4.0</td></tr> <tr><td>40</td><td>30.6</td><td>4.2</td></tr> <tr><td>50</td><td>34.2</td><td>5.0</td></tr> <tr><td>60</td><td>38.0</td><td>6.0</td></tr> <tr><td>80</td><td>45.0</td><td>7.4</td></tr> </tbody> </table>		SIGNAL	INSERTION FORCE (N) MAX	WITHDRAWAL FORCE (N) MIN	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	X —
SIGNAL	INSERTION FORCE (N) MAX	WITHDRAWAL FORCE (N) MIN																																				
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 EXTRACTATIONS.		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	06.01.27																																	
			DESIGNED	YH. MICHIDA	06.01.27																																	
			DRAWN	HK. MURAKAMI	06.01.27																																	
Note QT: Qualification Test AT: Assurance Test X: Applicable Test			DRAWING NO.		ELC4-163508-09																																	
HRS	SPECIFICATION SHEET		PART NO.	DF12D (3.0) -*DP-0.5V (81)																																		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL537	△ 1/1																																	