


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#-*DS-0.5V(81) DF12#-*DS-0.5V(86)																						
	CURRENT	0.3 A																									
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>PIN COUNT</th> <th>INSERTION FORCE (N)MAX</th> <th>WITHDRAWAL FORCE (N)MIN</th> </tr> </thead> <tbody> <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>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> </tbody> </table>	PIN COUNT	INSERTION FORCE (N)MAX	WITHDRAWAL FORCE (N)MIN	20	23.4	2.6	30	27.0	3.4	36	29.0	4.0	40	30.6	4.2	50	34.2	5.0	60	38.0	6.0	X	—
PIN COUNT	INSERTION FORCE (N)MAX	WITHDRAWAL FORCE (N)MIN																									
20	23.4	2.6																									
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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 <sup>2</sup> 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:STORAGEIS 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																						
	1	DIS-H-00003088	SH. HOSODA	TS. MIYAZAKI	17. 09. 29																						
				APPROVED	MO. NAKAMURA	06. 01. 31																					
				CHECKED	TS. MIYAZAKI	06. 01. 31																					
				DESIGNED	YH. MICHIDA	06. 01. 31																					
				DRAWN	HK. MURAKAMI	06. 01. 31																					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-163517-09																						
	SPECIFICATION SHEET		PART NO.	DF12D (4. 0) -*DP-0.5V (81)																							
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL537		1/1																					