

APPLICABLE STANDARD				
RATING	OPERATING TEMPERATURE RANGE	-45°C TO +125°C (NOTES 1)	STORAGE TEMPERATURE RANGE	-10°C TO + 60°C (NOTE2)
	VOLTAGE	50V AC	APPLICABLE CONNECTOR	DF12# (3.0) -*DS-0.5V (**)
	CURRENT	0.3A		

### SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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#### CONSTRUCTION

GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	—
MARKING	CONFIRMED VISUALLY.		X	—

#### ELECTRIC CHARACTERISTICS

CONTACT RESISTANCE	100m A (DC OR 1000 Hz).	50mΩ MAX.	X	—
INSULATION RESISTANCE	100V DC	500M Ω MAX	X	—
VOLTAGE PROOF	150V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	—

#### MECHANICAL CHARACTERISTICS

INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	<table border="1" style="width: 100%; text-align: center;"> <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	—
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MECHANICAL OPERATION	50TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 50mΩ 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 1μs. 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 1μs. 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→10TO15min UNDER 5 CYCLES.	① CONTACT RESISTANCE: 50mΩ 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: 50mΩ 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	<p>【RECOMMENDED TEMPERATURE PROFILE】</p> <p>《SOLDERING AREA》 MAX250°C, 220°C FOR 60 SECONDS MAX.</p> <p>《PREHEATING AREA》 150 TO 180°C 90~120 SECONDS. MAXIMUM TWICE ACTION IS ALLOWED UNDER THE SAME CONDITION.</p> <p>【RECOMMENDED MANUAL SOLDELING CONDITION】 SOLDERING IRON TEMPERATURE 350°C SOLDERING TIME : WITHIN 3 SECONDS.</p>	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.		

#### 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. OPERATION TEMPERATURE FOR TAPE-AND-REAL PRODUCTS SHALL BE -10 TO 50°C. MOUNT CONNECTORS WITHIN 12HOURS AFTER TAKING OUT FROM THE PACKAGE.  
 UNLESS OTHERWISE SPECIFIED , REFER TO JIS C 5402 .

COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
2	DIS-H-001982	YH. MICHIDA	TS. MIYAZAKI	07.04.20
		APPROVED	TS. SAKATA	04.12.17
		CHECKED	TS. SAKATA	05.01.0517
		DESIGNED	AR. TAKAHASHI	04.12.09
		DRAWN	YH. MICHIDA	05.01.059

Note QT:Qualification Test AT:Assurance Test X:Applicable Test DRAWING NO. ELC4-163507-04

<b>SPECIFICATION SHEET</b>	PART NO.	DF12 (3.0) -*DP-0.5V (86)		
HIROSE ELECTRIC CO., LTD.	CODE NO.	CL537		1/1