

TO

DESCRIPTION OF REVISIONS		BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS		BY	CHKD	DATE
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<b>APPLICABLE STANDARD</b>										
RATING	OPERATING TEMPERATURE RANGE	- 3 5 °C TO 8 5 °C(NOTE1)			STORAGE TEMPERATURE RANGE	- 1 0 °C TO 6 0 °C				
	VOLTAGE	3 0 V A C			APPLICABLE CONNECTOR	DF30*-24DP-0.4V (**)				
	CURRENT	0. 3 A								
<b>SPECIFICATIONS</b>										
ITEM		TEST METHOD			REQUIREMENTS			QT	AT	
<b>CONSTRUCTION</b>										
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING.			X	X	
MARKING		CONFIRMED VISUALLY.						X	X	
<b>ELECTRICAL CHARACTERISTICS</b>										
CONTACT RESISTANCE		1 0 0 mA (DC OR 1000 Hz).			1 0 0 mΩ MAX.			X	-	
INSULATION RESISTANCE		1 0 0 V DC.			5 0 MΩ MIN.			X	-	
VOLTAGE PROOF		1 0 0 V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN.			X	-	
<b>MECHANICAL CHARACTERISTICS</b>										
MECHANICAL OPERATION		5 0 TIMES INSERTIONS AND EXTRACTIONS.			① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.			X	-	
VIBRATION		FREQUENCY 1 0 TO 5 5 Hz, SINGLE AMPLITUDE 0. 7 5 mm, 1 0 CYCLES OF EACH 3 AXIAL DIRECTION FOR 5 min.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.			X	-	
SHOCK		4 9 0 m/s <sup>2</sup> DURATION OF PULSE 1 1 ms AT 3 TIMES FOR 3 DIRECTIONS.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.			X	-	
<b>ENVIRONMENTAL CHARACTERISTICS</b>										
DAMP HEAT (STEADY STATE)		EXPOSED AT 4 0 ± 2 °C, 9 0 TO 9 5 %, 9 6 h.			① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② INSULATION RESISTANCE: 2 5 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.			X	-	
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55→ 5 TO 35→85→ 5 TO 35 °C TIME 30→10 TO 15→30→10 TO 15 min UNDER 5 CYCLES.			① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② INSULATION RESISTANCE: 5 0 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.			X	-	
CORROSION SALT MIST		EXPOSED IN 5% SALT WATER SPRAY FOR 48 h. (TEST STANDARD:IEC60068)			① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② NO HEAVY CORROSION.			X	-	
SULPHUR DIOXIDE		EXPOSED IN 25 PPM FOR 96h. (TEST STANDARD:IEC60068)			① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② NO HEAVY CORROSION.			X	-	
REMARKS				DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED		
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT.				F.Matsuki '04.12.22	A.Zakahashi '04.12.22	T.Sakata '04.12.22	T.Sakata '04.12.22			
Unless otherwise specified, refer to IEC60512.										
Note QT: Qualification Test AT: Assurance Test X: Applicable Test										
<b>HRS</b> HIROSE ELECTRIC CO., LTD.				SPECIFICATION SHEET			PART NO. DF30FC-24DS-0.4V (81)			
CODE NO.(OLD) CL		DRAWING NO. ELC4-303463-05			CODE NO. CL684-1111-0-81			1 1		



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COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△	4	RE-H-06664	YM	TS	04.12.17	△			. .
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■ NOTES WHEN MATING DF30 SERIES CONNECTORS.

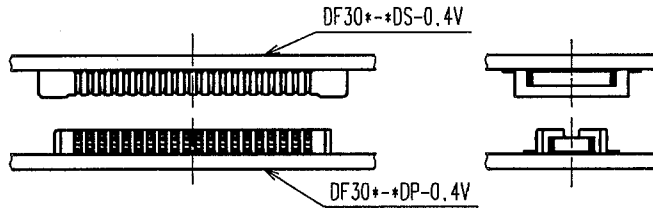


FIGURE-1

PLEASE LOCATE EACH CONNECTOR IN PARALLEL WHEN YOU PUT THEM IN MATING POSITION.

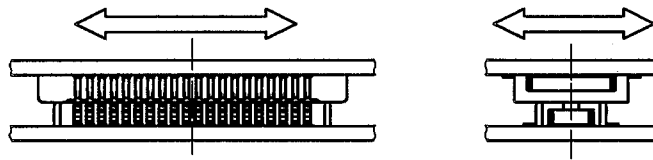


FIGURE-2

THE INSULATOR WILL BE DAMAGED AND THE CONTACTS WILL BE DEFORMED IF THE CONNECTORS ARE LOCATED INCLINED AND MATED BY EXCESSIVE FORCE.

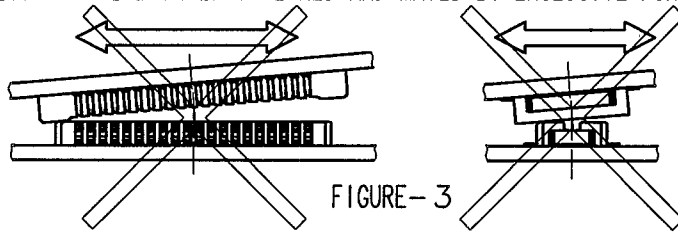


FIGURE-3

WHEN YOU LOCATE TWO CONNECTORS IN A PROPER POSITION, THEY WILL GO DOWN SLIGHTLY AT A LOWER LEVEL AND YOU WILL FIND THAT THEY GET LOCATED CORRECTLY. PLEASE MATE EACH CONNECTOR IN PARALLEL AFTER YOU CONFIRMED THAT THEY GO DOWN LOWER TO SOME EXTENT.



FIGURE-4

THE MATED CONDITIONS CAN BE RELEASED BY A DROP IMPACT OR THE APPLIED FORCE CAUSED BY FPC-HANDLING. FIX THE CONNECTORS BY APPLYING PRESSURE IN THE MATING DIRECTION WITH THE DEVICE OR A BUFFER MATERIAL.

CODE NO. (OLD)		DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
		Y.MICHIDA	A.TAKAHASHI	T.SAKATA	T.OMA	
NOTES WHEN MATING		04.12.16	04.12.16	04.12.16	04.12.16	
 SCALE FREE : 1 UNITS mm	DRAWING NO.	PART NO.				
	EDSC4-830174	DF30 Series				
 HIROSE ELECTRIC CO.,LTD.	CODE NO.				1 3	
	CL684					

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■ NOTES WHEN EXTRACTING

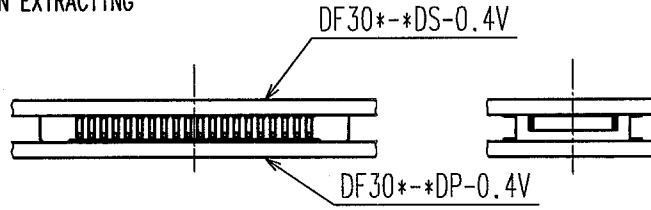


FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

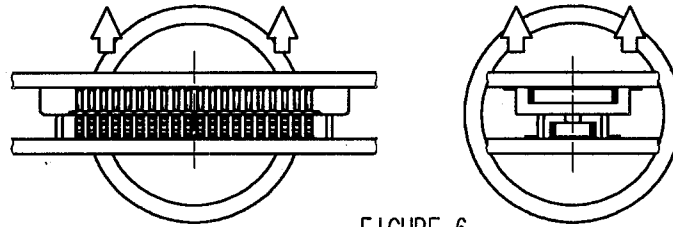


FIGURE-6

⚠ IF YOU'RE UNABLE TO EXTRACT IN PARALLEL DUE TO SET STRUCTURE OR SPACE, PLEASE EXTRACT AS FIGURE-7 (IN LONGER DIMENSION). PLEASE BE CAREFUL NOT TO DAMAGE CONTACTS AT SIDES, WHERE STRESS IS LIKELY TO GATHER WHEN CONNECTORS ARE MOUNTED ON SOFT FPC.

⚠ ESPECIALLY, PLEASE DO NOT EXTRACT FROM THE CORNER AS FIGURE-8. IT GIVES CRITICAL STRESS TO THE CONTACTS ON THE CROSS CORNER.

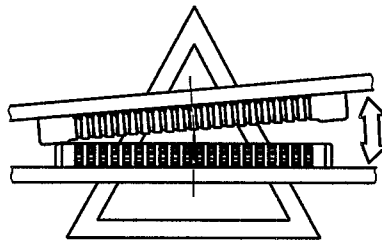


FIGURE-7

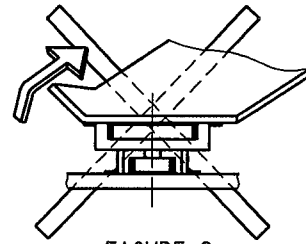


FIGURE-8

⚠ PLEASE DO NOT EXTRACT AS FIGURE-9. THE STRESS CONCENTRATES ON ONE ROW, AND MIGHT DAMAGE CONNECTORS TO MALFUNCTION.

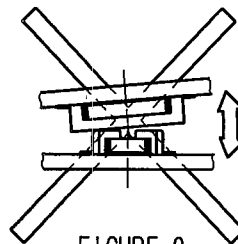


FIGURE-9

CODE NO. (OLD)		DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
		Y.MICHIDA	A.TAKAHASHI	T.SAKATA	T.OMA	
NOTES WHEN EXTRACTING		04.12.16	04.12.16	04.12.16	04.12.16	
 SCALE FREE : 1 UNITS mm	DRAWING NO.	PART NO.				
	EDSC4-830174	DF30 Series				
	<b>HRS</b> HIROSE ELECTRIC CO.,LTD.	CODE NO.	CL684			2/3

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⚠ WHEN FPC IS SOFT, STRESS IS CONCENTRATED ON THE CONTACTS AT CORNERS. PLEASE PAY ATTENTION TO THIS POINT AND DO NOT UNMATE CONNECTORS FROM CORNERS AS FIGURE-10. THIS GIVES SERIOUS DAMAGE ON CONTACTS, AND OCCURS SOLDER PEEL-OFF OR CONTACT COME-OFF.



FIGURE-10

IF YOU MOUNT PLUG CONNECTOR ON FPC, CONTACTS MIGHT COME OFF FROM HOUSING MOLD.

CONTACT MIGHT COME OFF FROM HOUSING MOLD.

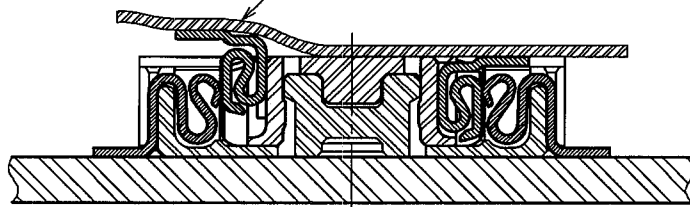


FIGURE-11

IN CASE YOU MOUNT RECEPTACLE CONNECTOR ON FPC, THERE IS NO RISK OF CONTACT COME-OFF. HIROSE RECOMMEND THAT RECEPTACLE IS MOUNTED ON FPC.

IN ORDER TO AVOID THIS RISK, IT IS RECOMMENDED THAT YOU MOUNT RECEPTACLE CONNECTOR ON FPC.



FIGURE-12

CODE NO. (OLD)		DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
NOTES WHEN EXTRACTING (SUPPLEMENTARY DATA)		Y.MICHIDA	A.TAKAHASHI	T.SAKATA	T.OMA	
		04.12.16	04.12.16	04.12.16	04.12.16	
 SCALE FREE : 1 UNITS mm	DRAWING NO.		PART NO.			
	EDSC4-830174		DF30 Series			
 HIROSE ELECTRIC CO.,LTD.		CODE NO.			3/3	
		CL684			3/3	

