

	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△					△				
△					△				

APPLICABLE STANDARD				
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*-30DP-0.4V(**)
	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

ELECTRICAL CHARACTERISTICS

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	-

MECHANICAL CHARACTERISTICS

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 ² 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	-

ENVIRONMENTAL CHARACTERISTICS

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. Unless otherwise specified, refer to IEC60512.	T.Nishi 04.07.30	K. Mitsuhashi 04.07.30	K. Kobayashi 04.07.30	J. Ono 04.07.30	

Note QT: Qualification Test AT: Assurance Test X: Applicable Test

HRS HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO. DF30FC-30DS-0.4V(81)
CODE NO.(OLD) CL	DRAWING NO. ELC4-303464-04	CODE NO. CL684-1112-2-81

1/1



TO

1	2		3		4				
COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△	4	RE-H-06664	YM	TS	04.12.17	△			. .
△						△			. .
△						△			. .

■ NOTES WHEN MATING DF30 SERIES CONNECTORS.

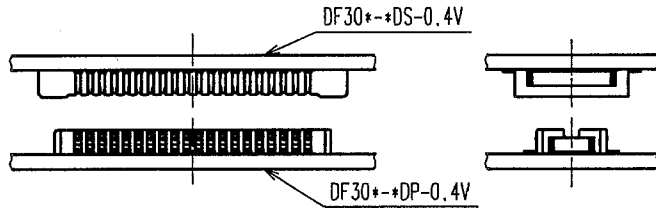


FIGURE-1

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

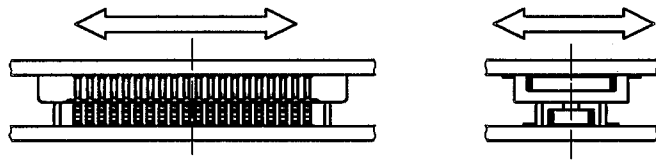


FIGURE-2

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

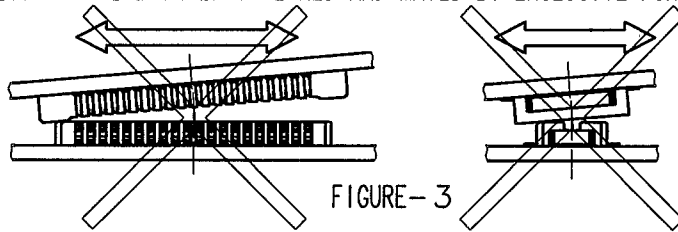


FIGURE-3

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.

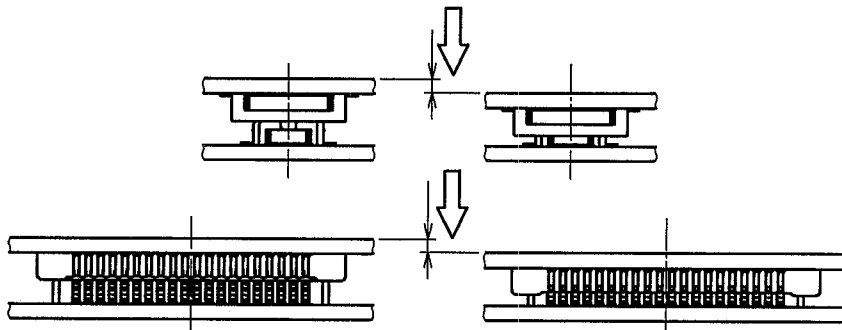


FIGURE-4

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		
	DRAWING NO.	PART NO.					
	EDSC4-830174	DF30 Series					
SCALE FREE : 1		CODE NO.			<table border="1"> <tr> <td>1</td> </tr> <tr> <td>3</td> </tr> </table>	1	3
1							
3							
UNITS mm	HIROSE ELECTRIC CO.,LTD.	CL684					

Apr.1.2017 Copyright 2017 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

TO



1		2			3			4		
COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	
△					△				. .	
△					△				. .	
△					△				. .	

■ NOTES WHEN EXTRACTING

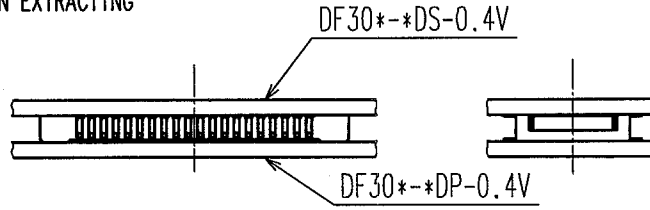


FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

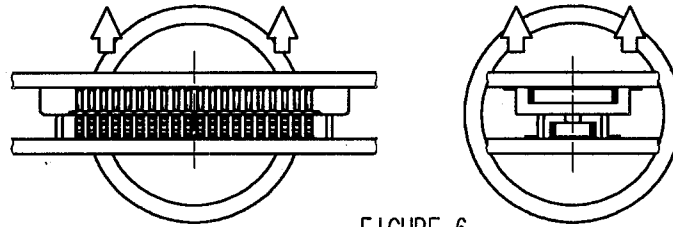


FIGURE-6

⚠ 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.

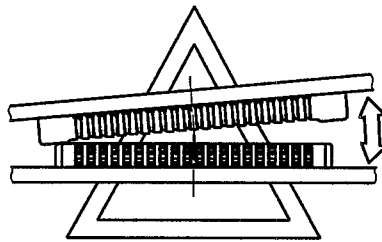


FIGURE-7

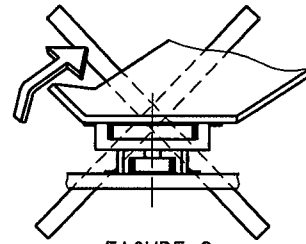


FIGURE-8

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

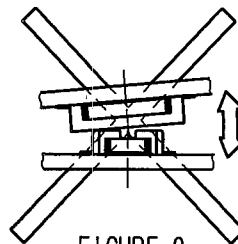


FIGURE-9

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			
	 HIROSE ELECTRIC CO.,LTD.		CODE NO.		CL684	
						2/3

TO



1	2				3				4	
COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	
△					△				.	
△					△				.	
△					△				.	

⚠ 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.

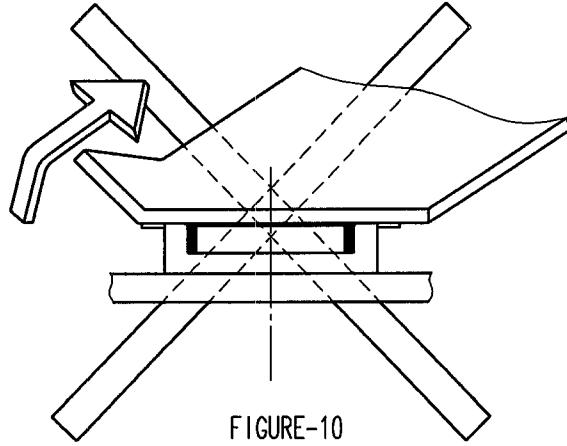


FIGURE-10

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

CONTACT MIGHT COME OFF FROM HOUSING MOLD.

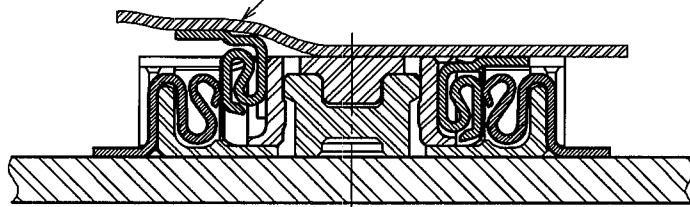


FIGURE-11

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.

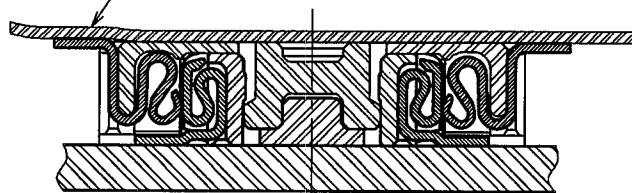


FIGURE-12

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	
DRAWING NO.		PART NO.				
EDSC4-830174		DF30 Series				
SCALE FREE : 1		CODE NO.				
UNITS mm		CL684				
HRS HIROSE ELECTRIC CO.,LTD.		3/3				

TO

