

TO

DESCRIPTION OF REVISIONS		BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS		BY	CHKD	DATE
△					△					
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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*-*DP-0.4V(**)			
	CURRENT	0. 3 A								
SPECIFICATIONS										
ITEM		TEST METHOD				REQUIREMENTS		QT	AT	
CONSTRUCTION										
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.				ACCORDING TO DRAWING.		×	×	
MARKING		CONFIRMED VISUALLY.						×	×	
ELECTRICAL CHARACTERISTICS										
CONTACT RESISTANCE		1 0 0 mA (DC OR 1000 Hz).				1 0 0 mΩ MAX.		×	—	
INSULATION RESISTANCE		1 0 0 V DC.				5 0 MΩ MIN.		×	—	
VOLTAGE PROOF		1 0 0 V AC FOR 1 min.				NO FLASHOVER OR BREAKDOWN.		×	—	
MECHANICAL CHARACTERISTICS										
MECHANICAL OPERATION		5 0 TIMES INSERTIONS AND EXTRACTIONS.				① CONTACT RESISTANCE: 1 0 0mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.		×	—	
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.		×	—	
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.		×	—	
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 0mΩ MAX. ② INSULATION RESISTANCE: 2 5 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.		×	—	
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 0mΩ MAX. ② INSULATION RESISTANCE: 5 0 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.		×	—	
CORROSION SALT MIST		EXPOSED IN 5% SALT WATER SPRAY FOR 48 h. (TEST STANDARD:IEC60068)				① CONTACT RESISTANCE: 1 0 0mΩ MAX. ② NO HEAVY CORROSION.		×	—	
SULPHUR DIOXIDE		EXPOSED IN 25 PPM FOR 96h. (TEST STANDARD:IEC60068)				① CONTACT RESISTANCE: 1 0 0mΩ MAX. ② NO HEAVY CORROSION.		×	—	
REMARKS					DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED	
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT.					T. Nishi	K. Miderikawa	K. Akashi	J. Ona		
Unless otherwise specified, refer to IEC60512.					04.08.25	04.08.25	04.08.25	04.08.25		
Note QT: Qualification Test AT: Assurance Test ×: Applicable Test										
HRS HIROSE ELECTRIC CO., LTD.					SPECIFICATION SHEET			PART NO. DF30FC-*DS-0.4V(82)		
CODE NO.(OLD)		DRAWING NO.			CODE NO.			1/1		
CL		ELC4-303556-03			CL684-****-*82			1/1		

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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

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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.

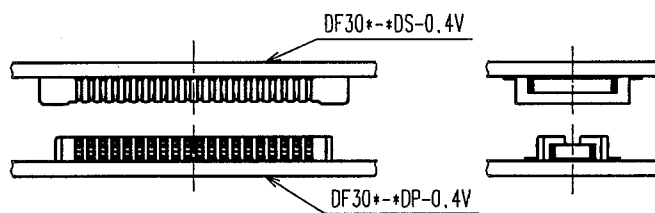


FIGURE-1

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

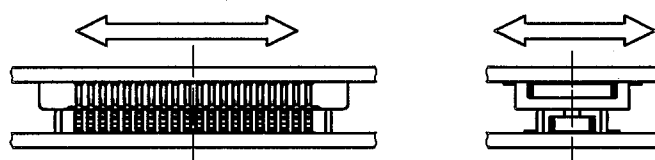


FIGURE-2

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

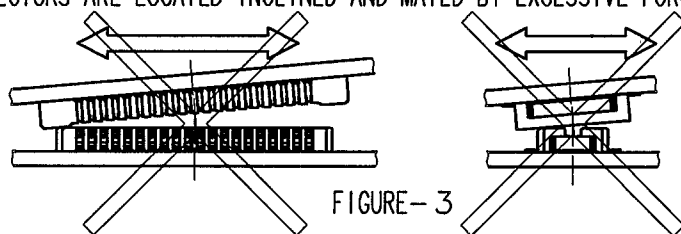


FIGURE-3

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.

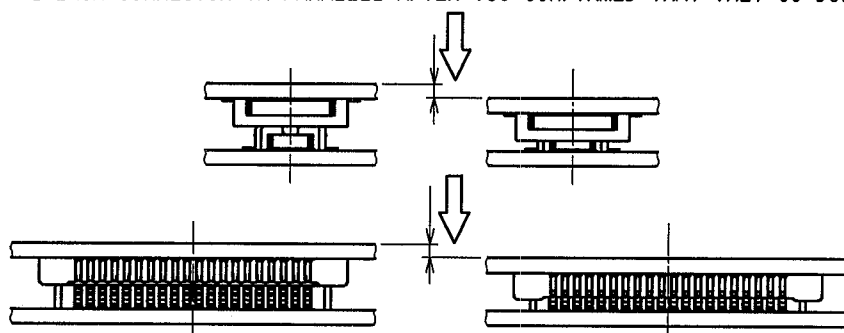


FIGURE-4

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

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■ NOTES WHEN EXTRACTING

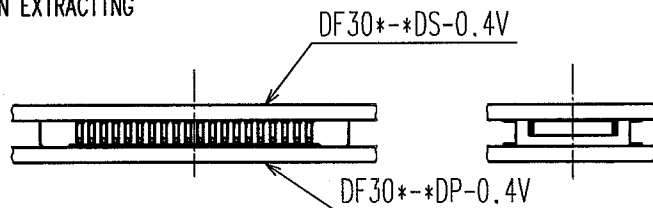


FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

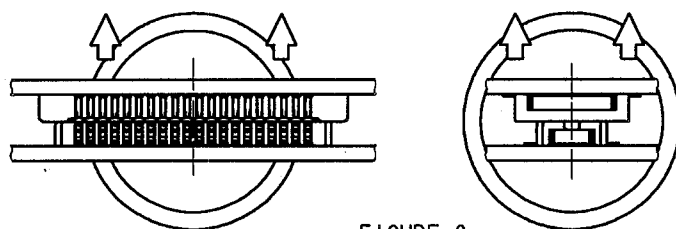


FIGURE-6

⚠ 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.

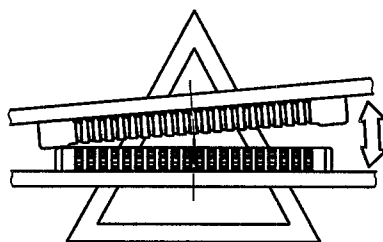


FIGURE-7

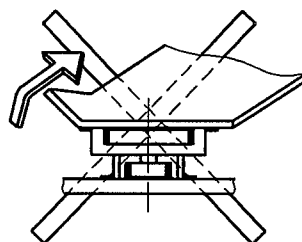


FIGURE-8

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

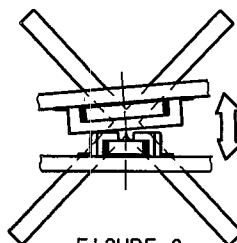


FIGURE-9

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

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① 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.

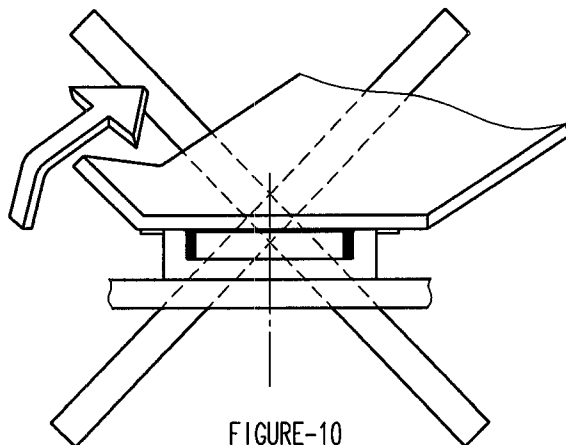


FIGURE-10

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

CONTACT MIGHT COME OFF FROM HOUSING MOLD.

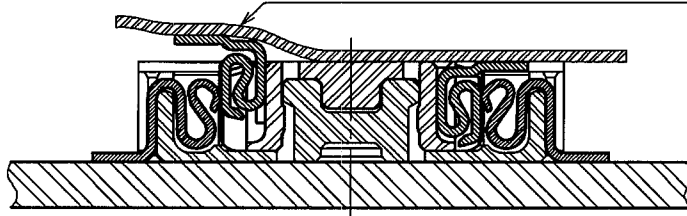


FIGURE-11

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.

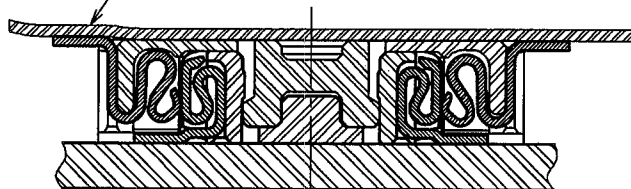


FIGURE-12

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

Temperature (°C)

250

240

220

200

150

100

60~120s

60s MAX

10s MAX

Time (s)

NOTE 1. REFLOW SYSTEM : IR REFLOW (AIR OR N₂ GAS)
 2. PERFORMING REFLOW : TWICE MAX

NC