

	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△					△				
△					△				
<b>APPLICABLE STANDARD</b>									
<b>RATING</b>	OPERATING TEMPERATURE RANGE	- 35 °C TO 85 °C(NOTE1)			STORAGE TEMPERATURE RANGE	- 10 °C TO 60 °C			
	VOLTAGE	30 V AC			APPLICABLE CONNECTOR	DF30*-60DP-0.4V(**)			
	CURRENT	0.3 A							
<b>SPECIFICATIONS</b>									
<b>ITEM</b>		<b>TEST METHOD</b>			<b>REQUIREMENTS</b>			<b>QT</b>	<b>AT</b>
<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		100 mA (DC OR 1000 Hz).			100 mΩ MAX.			X	-
INSULATION RESISTANCE		100 V DC.			50 MΩ MIN.			X	-
VOLTAGE PROOF		100 V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN.			X	-
<b>MECHANICAL CHARACTERISTICS</b>									
MECHANICAL OPERATION		50 TIMES INSERTIONS AND EXTRACTIONS.			① CONTACT RESISTANCE: 100mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.			X	-
VIBRATION		FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, 10 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		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 AND LOOSENESS, OF PARTS.			X	-
<b>ENVIRONMENTAL CHARACTERISTICS</b>									
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2 °C, 90 TO 95 %, 96 h.			① CONTACT RESISTANCE: 100mΩ MAX. ② INSULATION RESISTANCE: 25MΩ 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: 100mΩ MAX. ② INSULATION RESISTANCE: 50MΩ 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: 100mΩ MAX. ② NO HEAVY CORROSION.			X	-
SULPHUR DIOXIDE		EXPOSED IN 25 PPM FOR 96h. (TEST STANDARD:IEC60068)			① CONTACT RESISTANCE: 100mΩ MAX. ② NO HEAVY CORROSION.			X	-
<b>REMARKS</b> NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT.					<b>DRAWN</b>	<b>DESIGNED</b>	<b>CHECKED</b>	<b>APPROVED</b>	<b>RELEASED</b>
					F.MATSUKI '05.01.28	<i>A. Takahashi</i> '05.01.31	<i>T. Sakata</i> '05.01.31	<i>T. Sakata</i> '05.01.31	
Unless otherwise specified, refer to IEC60512.									
Note QT: Qualification Test AT: Assurance Test X: Applicable Test									
<b>HRS</b> HIROSE ELECTRIC CO., LTD.					<b>SPECIFICATION SHEET</b>			<b>PART NO.</b> DF30FC-60DS-0.4V(81)	
CODE NO.(OLD)		DRAWING NO.			CODE NO.			1	1
CL		ELC4-303169-04			CL684-1082-3-81				

TO



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COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
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■ NOTES WHEN MATING DF30 SERIES CONNECTORS.

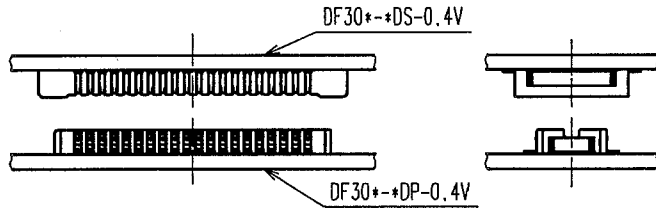


FIGURE-1

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.

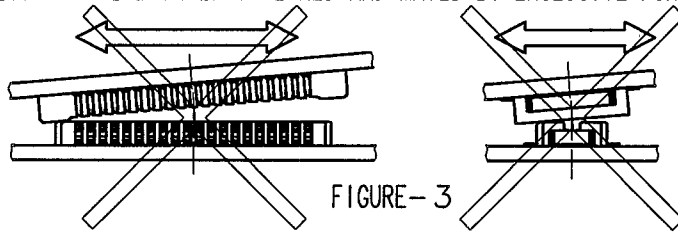


FIGURE-3

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. EDSC4-830174		PART NO. DF30 Series			
	 HIROSE ELECTRIC CO.,LTD.		CODE NO. CL684		1/3	

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COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
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■ NOTES WHEN EXTRACTING

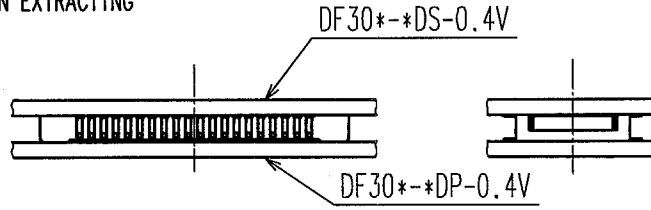


FIGURE-5

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.

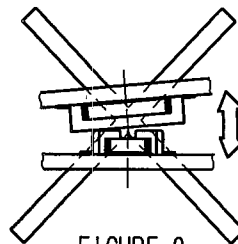


FIGURE-9

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	
	DRAWING NO.	PART NO.				
	EDSC4-830174	DF30 Series				
SCALE FREE : 1		CODE NO.				2/3
UNITS mm		CL684				

TO



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COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	
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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.

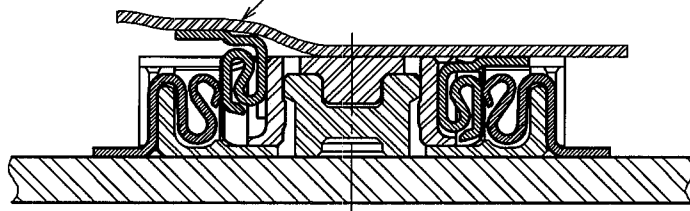


FIGURE-11

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

