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

APPLICABLE STANDARD				
RATING	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		

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	100 mA (DC OR 1000 Hz).	100 mΩ MAX.	×	—
INSULATION RESISTANCE	100 V DC.	50 MΩ MIN.	×	—
VOLTAGE PROOF	100 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	—
MECHANICAL CHARACTERISTICS				
MECHANICAL OPERATION	50 TIMES INSERTIONS AND EXTRACTIONS.	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
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.	×	—
SHOCK	490 m/s^2 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.	×	—
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40±2 °C, 90 TO 95 %, 96 h.	① CONTACT RESISTANCE: 100 mΩ MAX. ② INSULATION RESISTANCE: 25 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: 100 mΩ MAX. ② INSULATION RESISTANCE: 50 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: 100 mΩ MAX. ② NO HEAVY CORROSION.	×	—
SULPHUR DIOXIDE	EXPOSED IN 25 PPM FOR 96h. (TEST STANDARD:IEC60068)	① CONTACT RESISTANCE: 100 mΩ MAX. ② NO HEAVY CORROSION.	×	—

REMARKS
NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT.

Unless otherwise specified, refer to IEC60512.

DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
F.MATSUKI '05.01.28	T.Takahashi '05.01.31	T.Sakata '05.01.31	T.Sakata '05.01.31	

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

HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO. DF30FC-60DS-0.4V(81)

CODE NO.(OLD)	DRAWING NO.	CODE NO.	
CL	ELC4-303169-04	CL684-1082-3-81	1/1

TO

FORM No.231-1

NC

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

■NOTES WHEN MATING DF30 SERIES CONNECTORS.

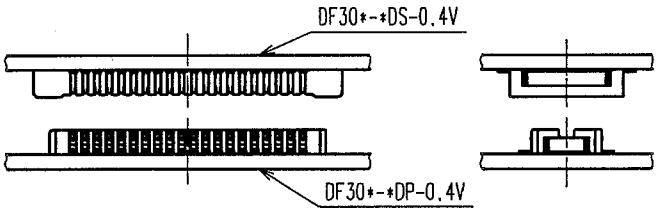

FIGURE-1

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

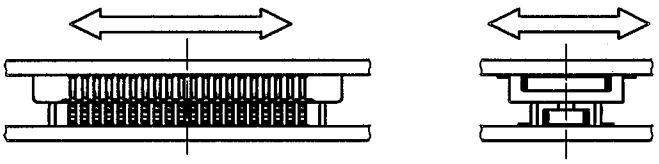

FIGURE-2

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

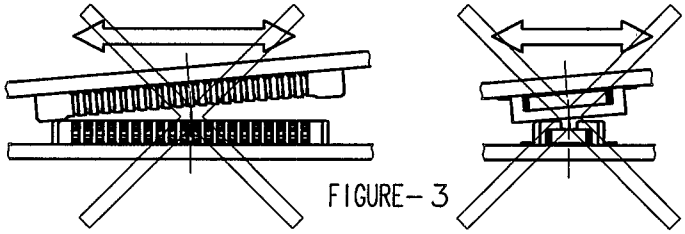

FIGURE-3

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

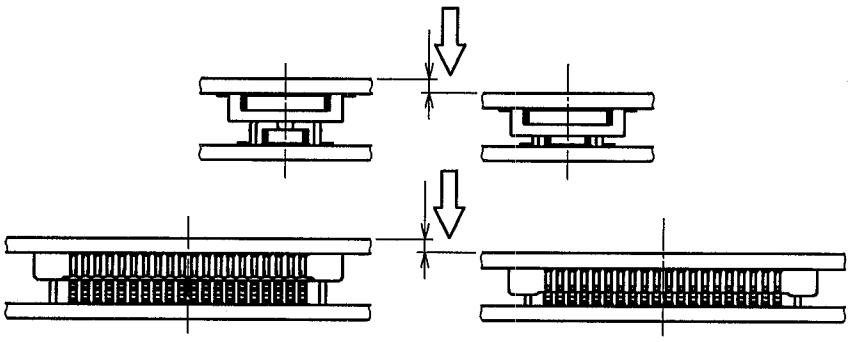

FIGURE-4

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 DEVISE OR A BUFFER MATERIAL.

CODE NO.(OLD)	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
NOTES WHEN MATING	Y.MICHIDA 04.12.16	A.TAKAHASHI 04.12.16	T.SAKATA 04.12.16	T.OMA 04.12.16	

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

1/3

FORM NO.228

TO

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

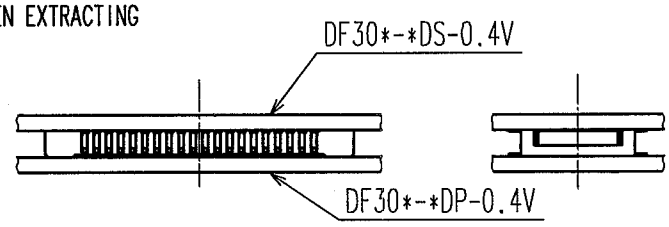

FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

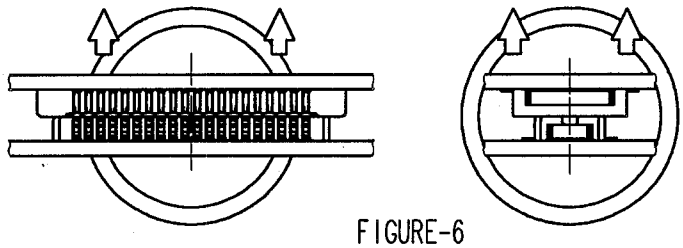

FIGURE-6

⚠1 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.

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

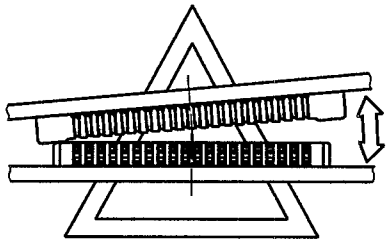

FIGURE-7

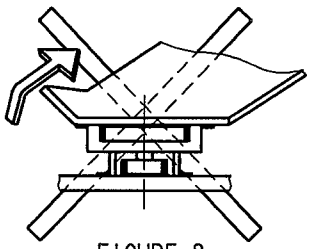

FIGURE-8

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

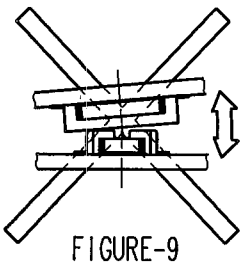

FIGURE-9

CODE NO.(OLD)	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
NOTES WHEN EXTRACTING	Y.MICHIDA 04.12.16	A.TAKAHASHI 04.12.16	T.SAKATA 04.12.16	T.OMA 04.12.16	

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

2/3

FORM NO.228

TO

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

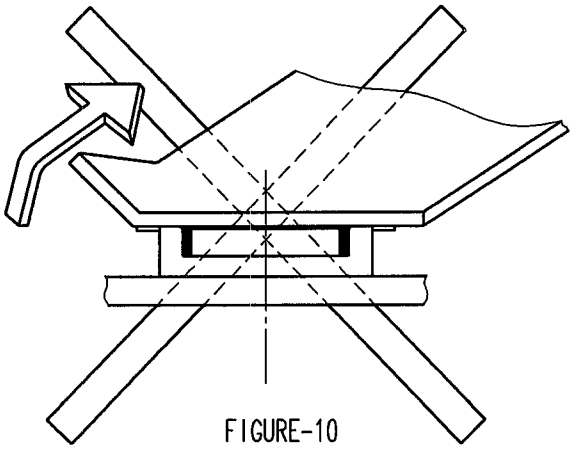

FIGURE-10

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

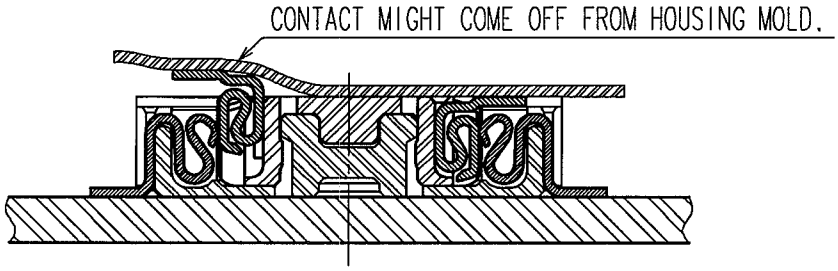

FIGURE-11

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

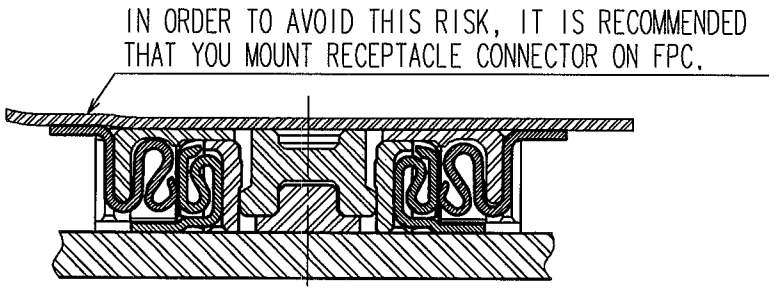

FIGURE-12

CODE NO.(OLD)	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
NOTES WHEN EXTRACTING (SUPPLEMENTARY DATA)	Y.MICHIDA 04.12.16	A.TAKAHASHI 04.12.16	T.SAKATA 04.12.16	T.OMA 04.12.16	

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

FORM NO.228

TO

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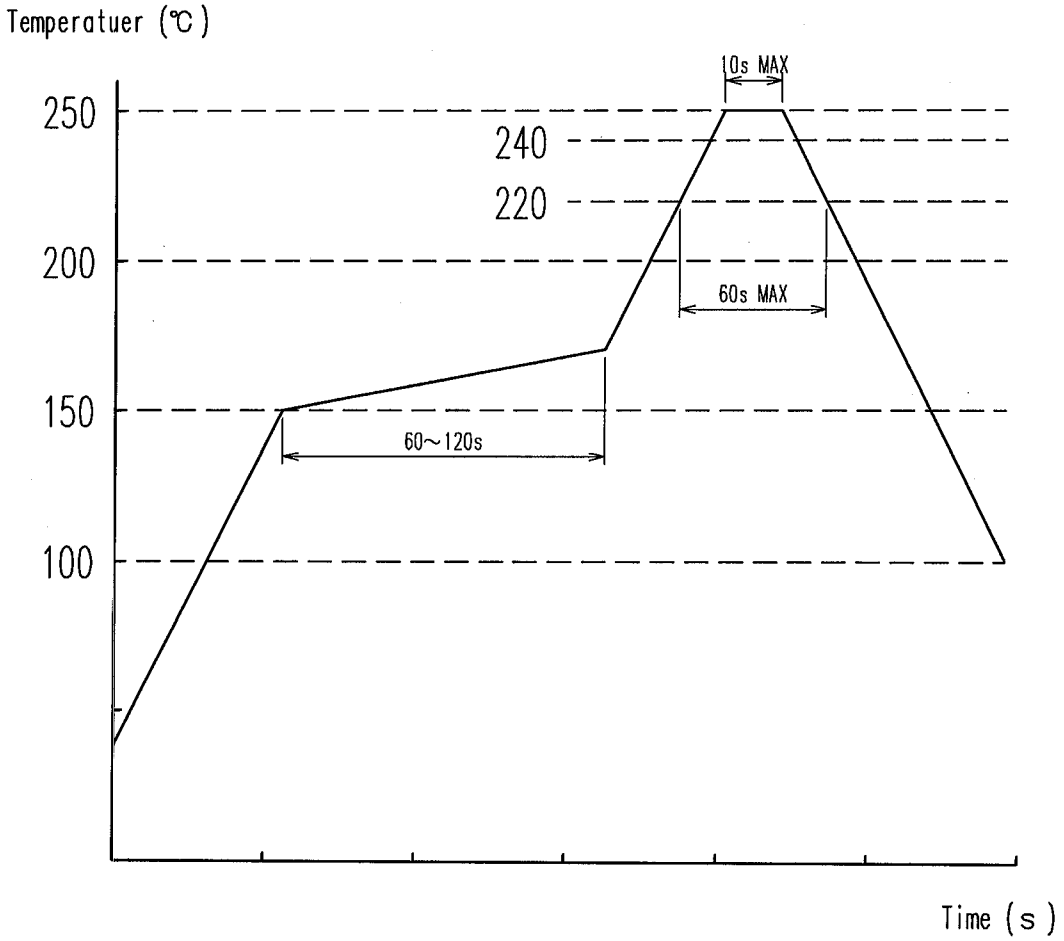

NOTE 1.REFLOW SYSTEM : IR REFLOW (AIR OR N_2 GAS)
2.PERFORMING REFLOW : TWICE MAX

NO.	MATERIAL	FINISH, REMARKS	NO.	MATERIAL	FINISH, REMARKS

CODE NO.(OLD)	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
RECOMMENDED TEMPERATUER PROFILE	T.NISHI 030819	W.Fukuchi 03.08.19	J.Tomioka 03.08.20	T.Ono 03.08.20	

SCALE	DRAWING NO.	PART NO.
FREE	EDC4-830116	DF30-*DS/DP-0.4V
UNITS mm	HIROSE ELECTRIC CO.,LTD.	CODE NO. CL684

1/1

FORM NO.228

TO