

In case of consideration for using Autom otive equipm ent/device which dem and high reliability, kindly contactour sales w indow correspondents.

DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
Δ				Δ				
Δ				Δ				

APPLICABLE STANDARD		OPERATING TEMPERATURE RANGE	STORAGE TEMPERATURE RANGE
		- 3 5 °C TO 8 5 °C(NOTE1)	- 1 0 °C TO 6 0 °C
RATING	VOLTAGE	3 0 V A C	DF30*-*DP-0. 4V (**)
	CURRENT	0. 3 A	

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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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	NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT.	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
	Unless otherwise specified, refer to IEC60512.	<i>T. Nishi</i>	<i>K. Mitsuhashi</i>	<i>M. Sasaki</i>	<i>J. Oka</i>	
		04.08.25	04.08.25	04.08.25	04.08.25	

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

HR5	HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO.	DF30FC-*DS-0. 4V (82)
CODE NO.(OLD)	DRAWING NO.	ELC4-303556-03	CODE NO.	CL684-****-*-82
CL				

TO				
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COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
4	RE-H-06664	YM	TTS	04.12.17					•••
									•••
									•••

■ NOTES WHEN MATING DF30 SERIES CONNECTORS.

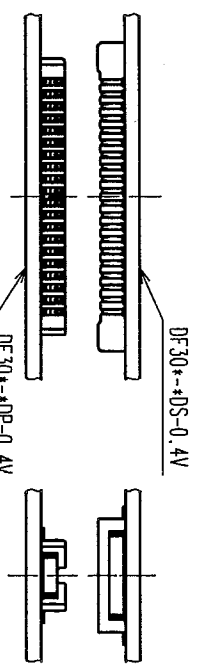


FIGURE - 1

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

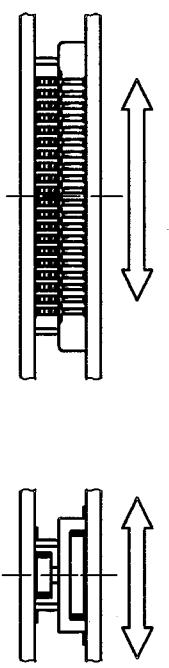


FIGURE - 2

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

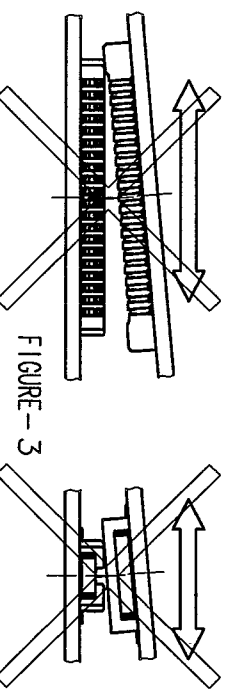


FIGURE - 3

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.

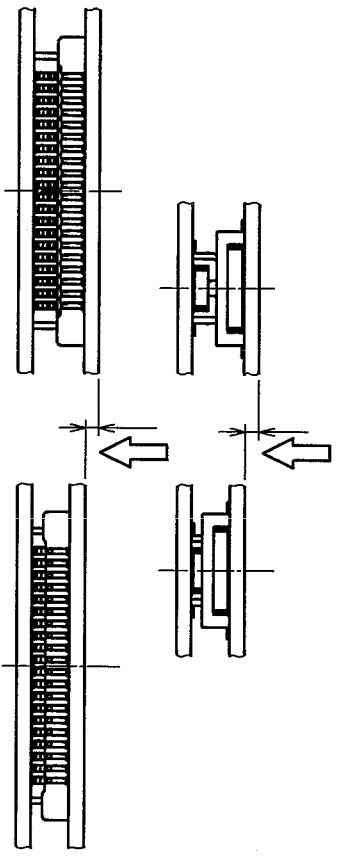


FIGURE - 4

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

CODE NO. (OLD)

NOTES WHEN MATING

DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
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

DRAWING NO.
EDSC4-830174

CODE NO.
CL684

1/3

TO

1

2

3

4



In case of consideration for using Autom otive equipm ent/device which dem and high reliability, kindly contactour sales w indow correspondents.

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

■ NOTES WHEN EXTRACTING

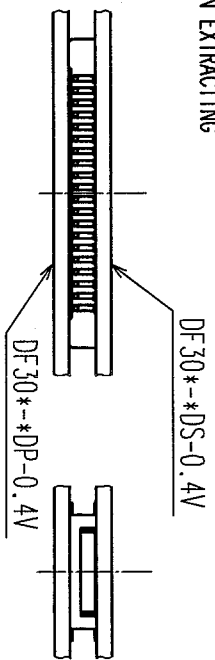


FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

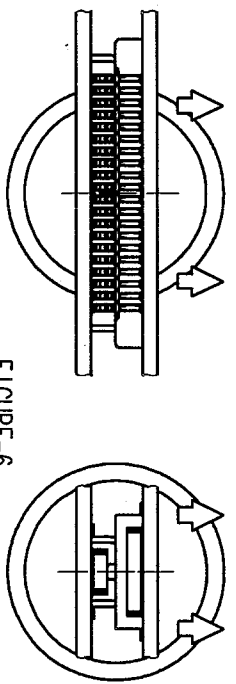


FIGURE-6

△ 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.

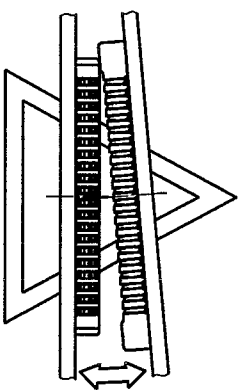


FIGURE-7

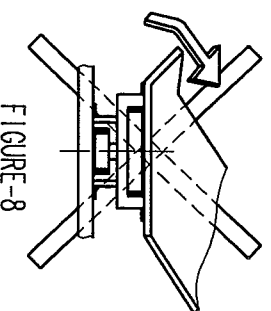


FIGURE-8

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

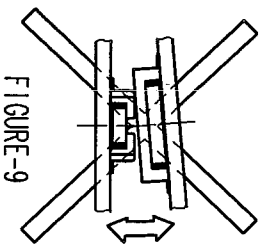
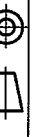


FIGURE-9

CODE NO. (OLD)

NOTES WHEN EXTRACTING

DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
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

HRS

HIROSE ELECTRIC CO., LTD.

PART NO. DF30 Series
CODE NO. CL684

2/3

1

2

3

4

FORM NO.228



In case of consideration for using Autom otive equipm ent/device which dem and high reliability, kindly contactour sales w indow correspondents.

1	2	3	4
COUNT	DESCRIPTION OF REVISIONS	BY CHKO	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.

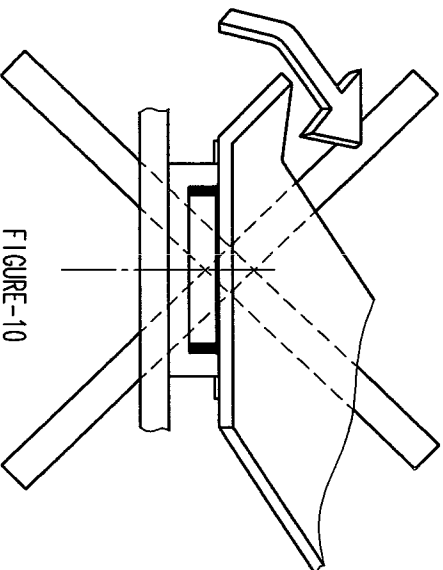


FIGURE-10

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

CONTACT MIGHT COME OFF FROM HOUSING MOLD.

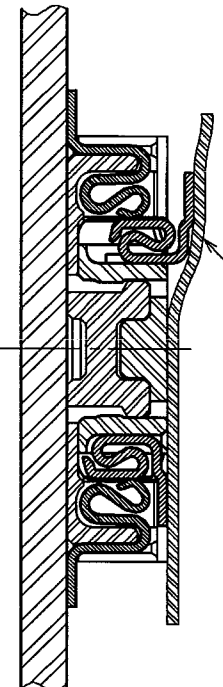


FIGURE-11

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.

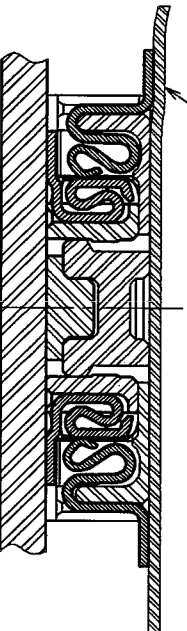


FIGURE-12

CODE NO. (OLD)

NOTES WHEN EXTRACTING (SUPPLEMENTARY DATA)

DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
Y.MICHIDA 04.12.16	A.TAKAHASHI 04.12.16	T.SAKATA 04.12.16	T.OMA 04.12.16	

DRAWING NO.

EDSC4-830174

PART NO.

DF30 Series

SCALE
FREE : 1

UNITS
mm

HRS

HIROSE ELECTRIC CO.,LTD.

CODE NO.

CL684

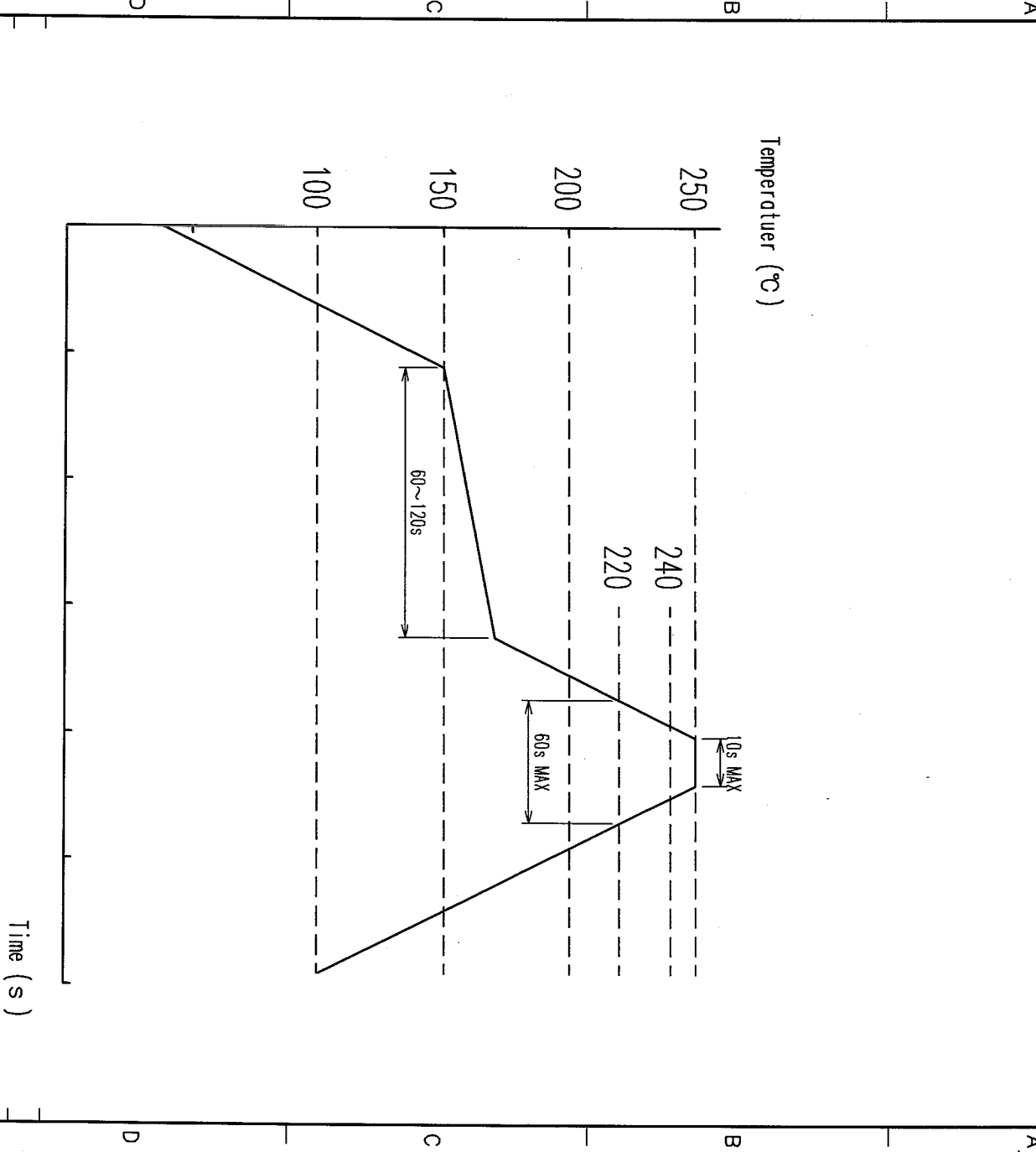
3/3

TO

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TO

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



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

NO. MATERIAL	FINISH, REMARKS	NO.	MATERIAL	FINISH, REMARKS
CODE NO. (OLD)				
RECOMMENDED TEMPERATURE PROFILE		DRAWN	DESIGNED	CHECKED
		T. NISHI 03.08.19	W. Takahashi 03.08.19	N. Yamashita 03.08.20
				APPROVED
				T. Omi 03.08.20
				RELEASED
DRAWING NO. EDC4-830116		PART NO. DF30-*DS/DP-0.4V		
SCALE FREE		CODE NO. CL684		
UNITS mm		FORM NO. 228		
1		2		
3		4		

