

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

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

APPLICABLE STANDARD		STORAGE TEMPERATURE RANGE	
OPERATING TEMPERATURE RANGE	- 3 5 °C TO 8 5 °C(NOTE1)	- 1 0 °C TO 6 0 °C	
RATING VOLTAGE	3 0 V A C	APPLICABLE CONNECTOR	DF30*-34DP-0.4V (**)
CURRENT	0. 3 A		

**SPECIFICATIONS**

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
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<b>CONSTRUCTION</b>				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X

ELECTRICAL CHARACTERISTICS				
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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				
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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	-
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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	-
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SHOCK	4 9 0 m/s <sup>2</sup> 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	-
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ENVIRONMENTAL CHARACTERISTICS				
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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	-
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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	-
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CORROSION SALT MIST	EXPOSED IN 5% SALT WATER SPRAY FOR 48 h. (TEST STANDARD: IEC60069)	① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② NO HEAVY CORROSION.	X	-
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SULPHUR DIOXIDE	EXPOSED IN 25 PPM FOR 96h. (TEST STANDARD: IEC60069)	① CONTACT RESISTANCE: 1 0 0 mΩ MAX. ② NO HEAVY CORROSION.	X	-
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REMARKS	NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT.	DRAWN F. MATSUKI DESIGNED <i>F. Matsuki</i> CHECKED <i>T. Suda</i> APPROVED <i>T. Suda</i>		
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Unless otherwise specified, refer to IEC60512.

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

<b>HRS</b> HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO.	DF30FG-34DS-0.4V (81)
CODE NO. (OLD)	DRAWING NO.	CODE NO.	
CL	ELC4-303465-03	CL684-1113-5-81	

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					..
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■ NOTES WHEN MATING DF30 SERIES CONNECTORS.

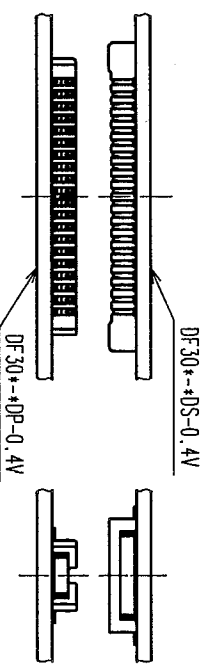


FIGURE - 1

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

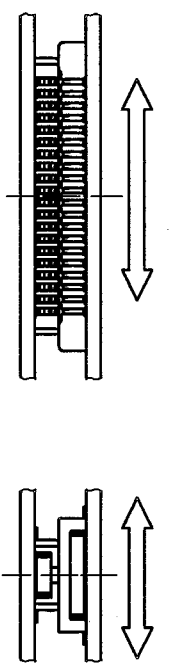


FIGURE - 2

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

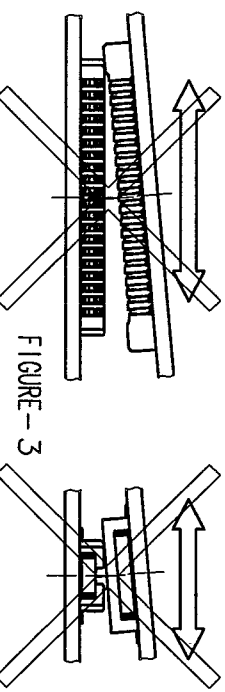


FIGURE - 3

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.

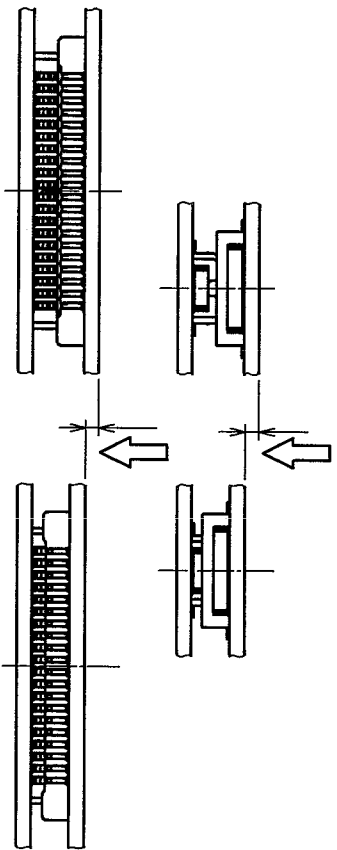


FIGURE - 4

THE MATED CONDITIONS CAN BE RELEASED BY A DROP IMPACT OR THE APPLIED FORCE CAUSED BY FCC-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	
	04.12.16	04.12.16	04.12.16	04.12.16	

NOTES WHEN MATING

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

TO



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

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

■ NOTES WHEN EXTRACTING

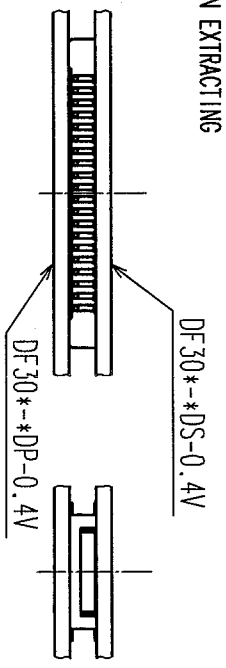


FIGURE-5

WHEN YOU EXTRACT CONNECTORS, PLEASE EXTRACT IN PARALLEL.

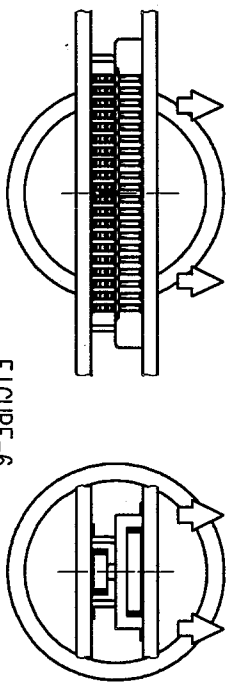


FIGURE-6

△ 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.

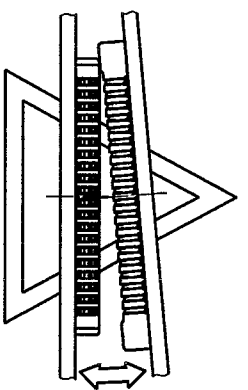


FIGURE-7

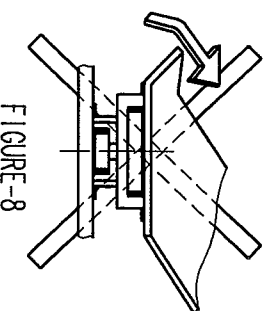


FIGURE-8

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

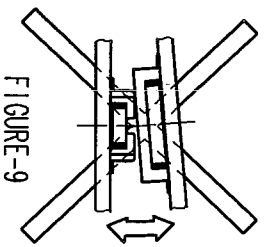


FIGURE-9

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	



DRAWING NO.

EDSC4-830174

PART NO.

DF30 Series

SCALE  
FREE : 1

**HRS**

HIROSE ELECTRIC CO., LTD.

CODE NO.

CL684

2/3

1

2

3

4

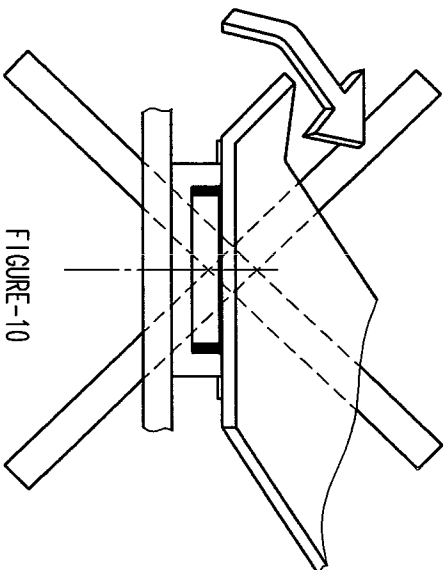
FORM NO. 228



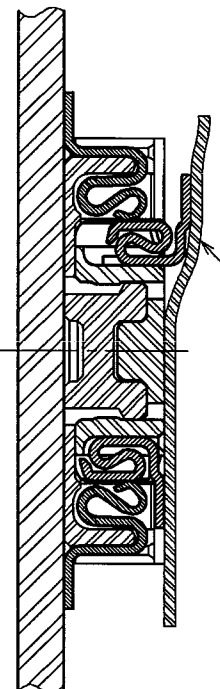
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△									• •
△									• •
△									• •

△ 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.



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



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.

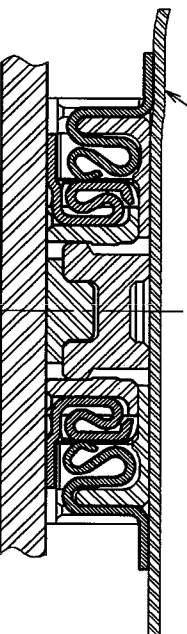


FIGURE-12

CODE NO. (OLD)

DRAWN

DESIGNED

CHECKED

APPROVED

RELEASED

NOTES WHEN EXTRACTING (SUPPLEMENTARY DATA)

Y. MICHIDA  
04.12.16

A. TAKAHASHI  
04.12.16

T. SAKATA  
04.12.16

T. OMA  
04.12.16

DRAWING NO.

PART NO.

EDSC4-830174

DF30 Series

SCALE  
FREE : 1

CODE NO.

**HRS**

HIROSE ELECTRIC CO., LTD.

CL684

3/3

TO

1

2

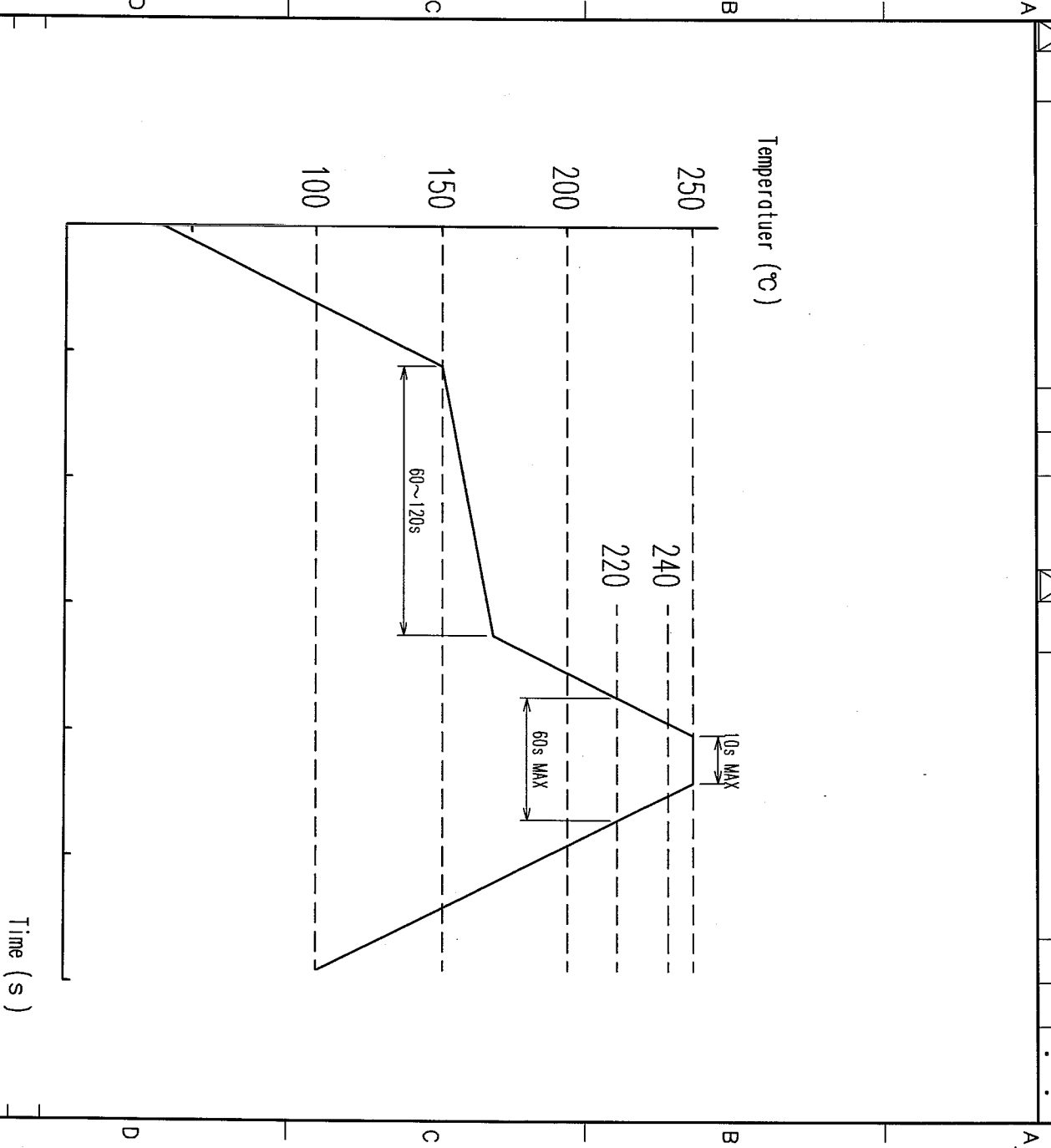
3

4

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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 N<sub>2</sub> GAS)  
 2. PERFORMING REFLOW : TWICE MAX

NO. MATERIAL	FINISH, REMARKS	NO. MATERIAL	FINISH, REMARKS
CODE NO. (OLD)			
RECOMMENDED TEMPERATURE PROFILE		DRAWN	DESIGNED
		T. NISHI 03.08.19	W. Takahashi 03.08.19
		CHECKED	APPROVED
		<i>[Signature]</i> 03.08.20	T. Ono 03.08.20
		RELEASED	
SCALE	DRAWING NO.	PART NO.	CODE NO.
FREE	EDC4-830116	DF30-*DS/DP-0.4V	CL684
UNITS			
mm			

