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File E52653 Project 90SC13796

April 2, 1991

REPORT

ON

COMPONENT - RECEPTACLES FOR ATTACHMENT PLUGS AND PLUGS

Hirose Electric Co., Ltd. Yokohama 222, Japan

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#### DESCRIPTION

### PRODUCT COVERED:

USR Component Connector, DF1B Series and DF11 Series

DF1B Series Single Row Socket Cat. No. DF1B-\*S-2.5R\*\*

Notes: \* : 2 thru 16, 18 or 20 \*\*: (01) thru (99) or blank.

DF1B Series Double Row Socket

Cat. No. DF1B-\*DS-2.5RC\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40 \*\*: (01) thru (99) or blank.

DF1B Series Single Row In-line Socket

Cat. No. DF1B-\*ES-2.5RC\*\*

Notes: \* : 2 thru 13

\*\*: (01) thru (99) or blank.

DF1B Series Double Row In-line Socket

Cat. No. DF1B-\*DES-2.5RC\*\*

Notes: \* : 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 34 \*\* : (01) thru (99) or blank.

DF1B Series Single Row Pin Header

Cat. No. DF1B-\*P-2.5DS\*\*

Notes: \* : 2 thru 16, 18 or 20 \*\*: (01) thru (99) or blank.

Cat. No. DF1B-\*P-2.5DSA\*\*

Notes: \* : 2 thru 16, 18 or 20

\*\*: (01) thru (99) or blank.

Cat. No. DF1BD-\*P-2.5DSA\*\*

Notes: \* : 2 thru 10

\*\*: (01) thru (99) or blank.

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DF1B Series Double Row Pin Header

Cat. No. DF1B-\*DP-2.5DS\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40

\*\*: (01) thru (99) or blank.

Cat. No. DF1B-\*DP-2.5DSA\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38 or 40
\*\* : (01) thru (99) or blank.

DF1B Series Single Row Plug

Cat. No. DF1B-\*EP-2.5RC\*\*

Notes: \* : 2 thru 13

\*\*: (01) thru (99) or blank.

Cat. No. DF1BA-\*EP-2.5RC\*\*

Notes: \* : 2 thru 13

\*\* : (01) thru (99) or blank.

DF1B Series Double Row Plug

Cat. No. DF1B-\*DEP-2.5RC\*\*

Cat. No. DF1BA-\*DEP-2.5RC\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 or 34 \*\* : (01) thru (99) or blank.

\*

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DF11 Series Double Row Socket Connector

Cat. No. DF11-\*DS-2C\*\*

Cat. No. DF11H-\*DS-2C\*\*

Cat. No. DF11-\*DS-2DSA\*\*

Notes: \*: 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 or 32 \*\*: (01) thru (99) or blank.

Cat. No. DF11-\*DS-2R26\*\*

Notes: \*: 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 or 32 \*\*: (01) thru (99) or blank.

Cat. No. DF11-\*DS-2R28\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 or 32 \*\* : (01) thru (99) or blank.

Cat. No. DF11-\*DS-2V\*\*

Notes: \*: 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 40

\*\*: (01) thru (99) or blank.

Cat. No. DF11B-\*DS-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 40

\*\* : (01) thru (99) or blank.

Cat. No. DF11C-\*DS-2V\*\*

Notes: \*: 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 40

\*\*: (01) thru (99) or blank.

\*

DF11 Series Double Row Pin Header

Cat. No. DF11-\*DP-2DSA\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 34 \*\* : (01) thru (99) or blank.

Cat. No. DF11-\*DP-2DS\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or \*\*: (01) thru (99) or blank.

Cat. No. DF11-\*DP-2V\*\* Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or \*\*: (01) thru (99) or blank.

Cat. No. DF11B-\*DP-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 40 \*\*: (01) thru (99) or blank.

Cat. No. DF11C-\*DP-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or \*\*: (01) thru (99) or blank.

Cat. No. DF11D-\*DP-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or \*\*: (01) thru (99) or blank.

Cat. No. DF11F-\*DP-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 40 \*\* : (01) thru (99) or blank.

Cat. No. DF11G-\*DP-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 40 \*\*: (01) thru (99) or blank.

Cat. No. DF11J-\*DP-2V\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or \*\*: (01) thru (99) or blank.

Cat. No. DF11-\*DP-SP1\*\*

Notes: \* : 4, 6 or 8

\*\*: (01) thru (99) or blank.

Cat. No. DF11-\*DP-SP2\*\*

Notes: \* : 4, 6 or 8

\*\*: (01) thru (99) or blank.

Cat. No. DF11E-\*DP-2DSA\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32 or 34 \*\*: (01) thru (99) or blank.

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DF11 Series Double Row Plug
Cat. No. DF11-\*DEP-2C\*\*

Notes: \* : 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 or 32 \*\* : (01) thru (99) or blank.

All Series' designations may be followed by Suffix "Z", denoting lead free tin plating.

\*

# ELECTRICAL RATING:

Connector Type:	Contact Type	Wire Size	Voltage (V)	Amps
DF1B Pin Header			30	3 A
DF1B Socket	DF1B-2022SC#	20-22 AWG	30	3 A
	DF1B-2428SC#	24-28 AWG	30	1 A
	DF1B-30SC#	30 AWG	30	0.5 A
	DF1B-R24#	24 AWG	30	2 A
	DF1B-R26#	26 AWG	30	2 A
	DF1B-R28#	28 AWG	30	1 A
DF1B Plug	DF1B-2022PC#	20-22 AWG	30	3 A
	DF1B-2428PC#	24-28 AWG	30	1 A
	DF1B-30PC#	30 AWG	30	0.5 A
	DF1B-24PR#	24 AWG	30	2 A
	DF1B-26PR#	26 AWG	30	2 A
	DF1B-28PR#	28 AWG	30	1 A
DF11 Pin Header:			30	2 A
DF11 Socket:	S-V Contact	N/A	30	2A
	S(A) Contact	N/A	30	2 A
	DF11-22SC#	22 AWG	30	2 A
	DF11-2428SC#	24-28 AWG	30	1 A
	DF11-30SC#	30 AWG	30	0.5 A
	DF11-#DS-2R24	24 AWG	30	1 A
	DF11-#DS-2R26	26 AWG	30	1 A
	DF11-#DS-2R28	28 AWG	30	1 A
DF11 Plug	DF11-EP2428PC#	24-28 AWG	30	1 A

N/A: Surface mount on PCB

Disconnecting Use (see Sec Gen for required marking).

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### GENERAL:

These devices are multi-pole connectors intended for factory assembly where the acceptability of combinations is determined by UL LLC. The devices are identified as follows:

USR - Products designated USR have been investigated using US requirements as noted in the Test Record.

# TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in complete equipment where the acceptability of the combination is determined by UL LLC.

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

- 1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.
- 2. The enclosure of the device has live parts that may be exposed to user contact when the connector is energized. The device is suitable for use only within an acceptable enclosure.
- 3. The electrical and mechanical contact between the connector and the printed wiring board is to be judged in the end-use equipment.
- 4. The factory assembled contacts have been investigated for the following wire ranges and maximum tensile forces:

Part No.	Wire Range (AWG)	Tensile Force (lb)
DF1B	26 AWG	7
DF1B	30 AWG	4.5
DF1B	20 AWG	8
DF11	30 AWG	5.25
DF11	22, 26 AWG	8

## \*5. Deleted.

6. Deleted.