

File E52653

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REPORT

On

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL,
CONTROL AND POWER APPLICATIONS

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Tokyo, Japan

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DESCRIPTION

PRODUCT COVERED:

USR Component Connector, MDF7 Series:

* Cat. No. MDF7, followed by A, B, C, F, G, H, I, L, P, S, U or None, followed by -3 thru -**34**, followed by S, D, P or DP, followed by -2.54, followed by DSA or DS, **may be** followed by (01) thru (99).

GENERAL:

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

USR indicates investigation to United States Standards, UL 1977.

RATINGS:

The devices are identified as follows:

Connector Cat. No.	Connector Type	Electrical Rating	ILL.
MDF7-\$S-2.54DSA(YY)	Single Row Receptacle	250 V, 3A	1
MDF7-\$D-2.54DSA(YY)	Double Row Receptacle	250 V, 3A	2
MDF7#-\$P-2.54DSA(YY)	Single Row Straight Pin Header	250 V, 3A	3
MDF7-\$P-2.54DS(YY)	Single Row Right Angle Pin Header	250 V, 3A	4
MDF7#-\$DP-2.54DSA(YY)	Double Row Straight Pin Header	250 V, 3A	5
MDF7A-\$DP-2.54DSA(YY)	Double Row Pin Header Board to Board Type	250 V, 3A	6
MDF7H-8P-2.54DSA(YY)	Single Row Straight Pin Header	250 V, 3A	7

Disconnecting Use - see Sec Gen for required marking

NOMENCLATURE

EXAMPLE:

MDF7	H-	8	S	-	2.54	DSA	(01)
I	II	III	IV		V	VI	VII

I - Series Name: MDF7

II - Board-to-Board Size

None: 2.54 mm to 5.5 mm
A: 4.4 mm to 8.0 mm
B: 2.54 mm to 12 mm
C: 5.08 mm to 15 mm
F: 2.54 mm to 6.54 mm
G: 2.54 mm to 2.54 mm
H: 2.54 mm to 8.54 mm
I: 5.0 mm to 23.54 mm
L: 2.54 mm to 7.30 mm
P: 2.54 mm to 8.0 mm
S: 5.08 mm to 17.0 mm
U: 6.54 mm to 18.54 mm

*III - Number of Contacts: 3 ~ **34**

IV - Connector Type

S: Single Row Receptacle
D: Double Row Receptacle
P: Single Row Pin Header
DP: Double Row Pin Header

V. Contact Pitch: 2.54 mm

VI - Contact Type

DSA: Straight Dip
DS: Right Angle Dip

VII - (YY): Customer Specifications

01-99 or None: **Indicating packaging differences or Insulator material color variations unless noted otherwise.**

(70) to (99): **Employing TORAY insulating material**

Other than (70) to (99): **Employing other than TORAY insulating material**

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

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

Conditions of Acceptability - In order to be judged acceptable as a component of electrical equipment, the following conditions should be met.

- *1. **These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.**
2. These devices have been subjected to the Temperature test described in UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications, with the rated currents and maximum temperature rise values tabulated below. The conductors terminated by the device and other associated components are to be reviewed in the end-use to determine whether the temperature rise from the connector exceeds their maximum operating temperature ratings. The following connector Cat. No. was tested to represent all models in the MDF7 Series.

<u>Connector Cat Nos.</u>	<u>Current (A)</u>	<u>Maximum Temperature Rise</u>
MDF7-20D-2.54DSA/ MDF7-20DP-2.54DSA	3.0	42°C
MDF7-46DP-2.54DSA/ MDF7-46D-2.54DSA(55)	3.0	24.5°C (+)

(+) - Tested as individual mated pairs

3. These devices may be used at potentials not exceeding 250 V based on Dielectric Voltage-Withstand testing conducted at 1500 V ac in accordance with UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications.
4. The operating temperature of these devices shall not exceed 75 °C based upon the minimum thermal index ratings of the insulating materials.
5. The printed-wiring-board terminals have not been evaluated for mechanical secureness. The construction of the connector is to be reviewed when it is assembled to the particular printed wiring board used in the end-use application.