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REPORT

On

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

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## DESCRIPTION

## PRODUCT COVERED:

USR/CNR - Component **connectors** - Plugs and Receptacles, FX30B series:

- Cat. Nos. FX30B-\*P-3.81DS (zz), FX30B-\*P-3.81DSA\*\* (zz), FX30B-\*S-3.81DS (zz), FX30B-\*S-3.81DSA (zz), FX30B-\*P-7.62DS (zz), FX30B-\*P-7.62DSA\*\* (zz), FX30B-\*S-7.62DS (zz) and FX30B-\*S-7.62DSA (zz)

## GENERAL:

These devices are multi-pole connectors intended for factory assembly on printed wiring boards, where the acceptability of combinations is determined by UL LLC.

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

**CNR - Products designated CNR have been investigated using Canadian requirements as noted in the Test Record.**

\*

## ELECTRICAL RATING:

Connector Type:	Number of contacts	Amps	Voltage (V)
Plug FX30B-*P-3.81DS (zz) FX30B-*P-3.81DSA** (zz)	2	16	250
	3	15	
	4	13	
	5	13	
Plug FX30B-*P-7.62DS (zz) FX30B-*P-7.62DSA** (zz)	2	18	600
	3	16	
Receptacle FX30B-*S-3.81DS (zz) FX30B-*S-3.81DSA (zz)	2	16	250
	3	15	
	4	13	
	5	13	
Receptacle FX30B-*S-7.62DS (zz) FX30B-*S-7.62DSA (zz)	2	18	600
	3	16	

**Disconnecting Use - see Sec Gen for required marking**

## NOMENCLATURE:

<u>FX30B</u>	-	<u>*</u>	<u>P</u>	-	<u>3.81</u>	<u>DS</u>	<u>**</u>	<u>(zz)</u>
A		B	C		D	E	F	G

A = Series Name

B = Number of Contacts, 2 to 5

C = P represents Plug, S represents Receptacles

D = Contact Pitch, 3.81 or 7.62

E = DS represents Horizontal Mounting, DSA represents vertical mounting

F = Stacking height of 20, 25, **30** or **30A**, may or may not be used.

G = Additional suffix (01) through (99) or blank

**\*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.**

## Interruption of Current

- \*1. **These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.**

## Current-Carrying Capability and Current Ratings

2. These devices have been tested with the use of 16 AWG wire soldered on to the terminals for temperature test. The temperature rise on the devices is indicated below.

Cat. No.	Current	Maximum temperature Rise
FX30B-2P-3.81DS *FX30B-2S-3.81DS	16 A	20.9°C
FX30B-3P-3.81DS FX30B-3S-3.81DS	15 A	22.3°C
FX30B-4P-3.81DS FX30B-4S-3.81DS	13 A	22.1°C
FX30B-5P-3.81DS FX30B-5S-3.81DS	13 A	20.7°C
FX30B-3P-7.62DS FX30B-3S-7.62DS	16 A	28.9°C
FX30B-2P-7.62DS FX30B-2S-7.62DS	18 A	29.1°C

## Insulating Materials

3. These devices employ insulating materials with properties as tabulated below at the minimum thickness employed in the connector housing, the suitability of the insulating materials based on the documented values shall be determined in the end-use application. Please note the values specified in the table when multiple materials are indicated represent the minimum values for the group of materials.

**Mold Stress testing was performed at 140°C for 7 hours.**

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
All	A	0.8 mm	V-0	0	0	150	130

Note:

(#) - Code for Insulating Body Material.

- A. Kuraray Co Ltd (E90350), Grade GN2330.  
 1. Dielectric strength (kV/mm): --  
 2. CTI: 1

#### Mating Connectors

4. These devices have only been assessed for use with specific types of connectors within their product family. They have not been assessed to operate with any other similar devices from any other manufacturer.

#### Miscellaneous

5. 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.