

## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component Connector, Series Inverted thru Board Platform Connectors, Cat. Nos. 2213188-1, -2, -3, -4; Cat. Nos. 2213189-1, -2, -3, -4.

## GENERAL:

Cat. Nos. 2213188-1, -2, -3, -4 are multi-pole connectors intended for factory assembly on printed wiring boards and Cat. Nos. 2213189-1, -2, -3, -4 are multi-pole connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below, 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.

CNR indicates investigation to Canadian National Standards, C22.2 No. 182.3.

## RATINGS:

Cat. Nos.	Voltage [Vac/Vdc]	Ampere (A)	Conductor Sizes, Cu
2213188-1, -3	400	3	--
2213188-2, -4	400	3	--
*2213189-1, -3	400	3	22-18 AWG Cu solid, 20-18 AWG bonded,
<b>2213189-1, -3</b>	<b>400</b>	<b>9(1)</b>	<b>18 AWG str</b>
2213189-2, -4	400	2	26-24 AWG Cu solid

**Note (1): Max 8.5A for CNR.**

Flammability - V0

Disconnecting Use - see Sec Gen for required marking

NOMENCLATURE: The Series are designated as follows:

(1) Example:  $\frac{2213188}{I} \frac{-1}{II}$

I: - Series Inverted thru Board Platform Connectors - Card Edge Version

II: - Construction Variation:

- 1 - No cover, intended for use with 1.0 mm thick pcb
- 2 - No cover, intended for use with 1.6 mm thick pcb
- 3 - Cover provided, intended for use with 1.0 mm thick pcb
- 4 - Cover provided, intended for use with 1.6 mm thick pcb

(2) Example:  $\frac{2213189}{I} \frac{-1}{II}$

I: - Series Inverted thru Board Platform Connectors - Poke In Version

II: - Construction Variation:

- 1 - No cover, 22-18 AWG spring action termination (poke-in)
- 2 - No cover, 26-24 AWG spring action termination (poke-in)
- 3 - Cover provided, 22-18 AWG spring action termination (poke-in)
- 4 - Cover provided, 26-24 AWG spring action termination (poke-in)

## 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 - 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 subjected to the Temperature test with the rated currents and maximum temperature rise values tabulated below.

Cat Nos.	Current, A	Wire Size	Maximum Temperature Rise, °C
2213189-4	2	26 AWG sol	5.46
2213189-3	3	22 AWG sol	7.73
2213189-3	3	20 AWG bonded	5.31
2213189-3 (representing 2213189-1)	<b>9 (USR)</b>	18 AWG str	<b>33.8</b>
	<b>8.5 (CNR)</b>		<b>27.9</b>
2213188-3 (representing or 2213188-4)	3	--	8.96

## Insulating Materials

## and Report

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.

Series	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
Inverted thru Board Platform Connectors Housing and Cover	A	0.35 mm	V-0	-	-	130	130

(#) - Code for Insulating Body Material.

- A. Tyco Raw Material 1573878-1  
 1. Dielectric strength (kV/mm): 39  
 2. CTI: 4

#### Miscellaneous

4. For PCB edge connectors not employing an integral keying feature, the construction and/or mating orientation shall be of such a design that the polarization cannot be defeated by improper assembly during installation in the end product.