

File E28476
Project 00ME10809

October 19, 2000

REPORT

on

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

Tyco Electronics Corporatiion
Harrisburg, PA

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DESCRIPTION

PRODUCT COVERED:

Component Connectors - Duoplug 2.5 Connector Series

USR - Cat. Nos. 293207, 0-293207-3, 0-293207-5, 0-293207-6, 2-293207-6, 0-293207-7, 0-293207-9, 1-293207-1, 2-293207-1, 284930, 0-284930-3, 2-284930-3, 5-284930-3, 0-284930-4, 2-284930-4, 3-284930-4, 0-284930-5, 2-284930-5, 0-284930-6, 2-284930-6, 0-284930-7, 0-284930-8, 2-284930-8, 1-284930-0, 1-284930-1, 1-284930-3, 284931, 0-281931-3, 2-284931-3, 3-284931-3, 4-284931-3, 0-284931-5, 2-284931-5, 3-284931-5, 4-284931-5, 0-284931-6, 1-284931-6, 0-284931-7, 2-284931-7, 0-284931-8, 2-284931-8, 0-284931-9, 2-284931-9, 1-284931-0, 1-284931-1, **x-284931-y (x=0-5,y=0-9)**, **x-284932-y (x=0-4,y=0-9)**, 0-284932-3, 2-284932-3, 3-284932-3, 0-284932-4, 2-284932-4, 0-284932-5, 1-284932-5, 2-284932-5, 3-284932-5, 0-284932-6, 2-284932-6, 0-284932-7, 0-284932-8, 2-284932-8, 0-284932-9, 1-284932-0, 1-284932-1, 1-284932-6, 3-284932-6, 4-284932-3, 284970, 0-284970-3, 1-284970-3, 2-284970-3, 3-284970-3, 293132, 0-293132-3, 293153, 0-293153-3, 0-293153-4, 0-293153-6, 0-293153-8, 0-293153-9, 1-293153-9, 1-293153-6, 2-293153-6, 0-293153-7, **2-293153-7**, **2-293153-9**, 293249, 0-293249-5, 829868, 3-829868-3, 3-829868-4, 3-829868-5, 3-829868-6, 3-829868-7, 3-829868-8, 3-829868-9, 3-829868-0, 3-829869-1, 3-829869-2, 3-829869-3, 3-829869-4, 3-829869-5, 3-829869-6, 3-829869-7, 3-829869-8, 3-829869-9, 3-829869-0, 829869, 964428, 964428-3, 964428-4, 964428-5, 964428-6, 964428-7, 964428-8, 964428-9, 964428-0, 964429, 964429-0, 964429-1, 964429-2, 964429-3, 964429-4, 964429-5, 964429-6, 964429-7, 964429-8, 964429-9, 966194, 1-966194-3, 1-966194-4, 1-966194-5, 1-966194-6, 1-966194-7, 1-966194-8, 1-966194-9, 1-966194-0, 966195, 1-966195-1, 1-966195-2, 1-966195-3, 1-966195-4, 1-966195-5, 1-966195-6, 1-966195-7, 1-966195-8, 1-966195-9, 1-966195-0, 966480, 3-966480-3, 3-966480-5, 4-966480-5, 2-966480-6, 3-966480-6, 4-966480-6, 3-966480-7, 4-966480-7, 5-966480-7, 3-966480-9, 3-966481-1, 3-966481-3, 3-966481-5, 3-966481-7, 3-966481-9, 966481, 966842, 1-966842-3, 1-966842-5, 3-966842-6, 1-966842-7, 1-966842-9, 966930, 1-966930-3, 1-966930-7, 2-966930-7, 969928, 1-969928-4, 1-969928-6, 1241121, 1-1241121-3, 1-1241121-4, 1-1241121-5, 1-1241121-6, 1-1241121-7, 1-1241121-8, 1-1241121-9, 1-1241121-0, 1-1241122-1, 1-1241122-2, 1-1241122-3, 1-1241122-4, 1-1241122-5, 1-1241122-6, 1-1241122-7, 1-1241122-8, 1-1241122-9, 1-1241122-0, 1241515, 1-1241515-3, 1-1241516-1, 1355006, 1-1355006-3, 1-1355006-4, 1-1355006-5, 1-1355006-6, 1-1355006-7, 1-1355006-8, 1-1355006-9, 1-1355006-0, 1355179, 1-1355179-2, 1-1355179-3, 1-1355179-4, 1-1355179-5, 1-1355179-6, 3-1355179-6, 1-1355179-7, 1-1355179-8, 3-1355179-8, 1-1355179-9, 3-1355179-9, 3-1355179-0, 1-1355180-1, 1-1355180-2, 3-1355180-2, 1-1355180-3, 1-1355180-4, 1-1355180-5, 1-1355180-6, 1-1355180-7, 1-1355180-8, 1355180, 1394427, 1-1394427-3, 1-1394427-5, 1-1354427-8, 2-1384427-8, 1-1394427-9, 1534798, 3-1534798-3, 4-1534798-3, 5-1534798-3, 6-1534798-3, 7-1534798-3, 8-1534798-3, 2-1534798-3, 9-1534798-3, 1534798-3, 1-1534798-3, 3-1534798-5, 3-1534798-4, 2-1534798-5, 4-1534798-5, 5-1534798-5, 3-1534798-6, 5-1534798-6, 7-1534798-6, 8-1534798-6, 9-1534798-6, 1-1534798-6, 2-1534798-6, 3-1534798-7, 4-1534798-7, 3-1534798-8, 4-1534798-8, 5-1534798-8, 6-1534798-8, 7-1534798-8, 8-1534798-8, 3-1534798-9, 4-1534798-9, 5-1534798-9, 2-1534798-0, 3-1534798-0, 4-1534798-0, 2-1534799-1, 3-1534799-1, 4-1534799-1, 3-1534799-3, 4-1534799-3, 1-1534799-5, 1-1534799-9, 6-1534798-5, 7-1534798-5, 1534798-6, 5-1534798-7, 6-1534798-7, 9-1534798-8, 6-1534798-9, 5-1534798-0, 5-1534799-1, 2-1534799-2, 1-1534799-2,

PRODUCT COVERED (Cont'd):

***USR** - Cat. Nos. 2304527-3, 1-2304527-3, 2-2304527-3, 3-2304527-3, 4-2304527-3, 5-2304527-3, 6-2304527-3, 7-2304527-3, 8-2304527-3, 2304527-4, 2304527-5, 1-2304527-5, 2-2304527-5, 3-2304527-5, 4-2304527-5, 2304527-6, 1-2304527-6, 2-2304527-6, 3-2304527-6, 4-2304527-6, 5-2304527-6, 5-2304527-6, 6-2304527-6, 2304527-7, 1-2304527-7, 2-2304527-7, 3-2304527-7, 4-2304527-7, 2304527-9, 1-2304527-9, 2-2304527-9, 2304528-1, 1-2304528-1, 2304528-3, 5-284931-3, 1-284931-3, 4-284932-5, 5-966480-6, 4-966481-5, 5-966481-8, 5-966481-0, 1-966843-5, 284930-9, 1-284930-0, 1-284930-1, 1-284930-3, 4-284932-5, **x-2311500-Y (x=0-4, y=0,4-9)**, 5-2311500-5, 1-293207-3, 2-293207-9, 3-966481-0, **x-966843-y (x=1,y=1,3,5,7,9)**, 284865, 0-284865-3, 2-284865-3, 0-284865-4, 3-284865-4, 0-284865-5, 2-284865-5, 3-284865-5, 0-284865-6, 2-284865-6, 4-284865-6, 5-284865-6, 0-284865-7, 1-284865-7, 0-284865-8, 2-284865-8, 0-284865-9, 1-284865-0, 2-284865-0, 1-284865-2, 2-284865-2, 1-284865-4, 284866, 0-284866-3, 1-284866-3, 2-284866-3, 2-284866-4, 0-284866-5, 2-284866-5, 3-284866-5, 4-284866-5, 0-284866-6, 2-284866-6, 4-284866-6, 5-284866-6, 0-284866-7, 1-284866-7, 0-284866-8, 2-284866-8, 3-284866-8, 4-284866-8, 5-284866-8, 0-284866-9, 1-284866-9, 2-284866-9, 3-284866-9, 4-284866-9, 5-284866-9, 6-284866-9, 7-284866-9, 8-284866-9, 9-284866-9, 284866-9, 2-284866-0, 1-284866-2, 5-284866-3, 3-284866-3, 4-284866-3, 1-284866-4, 5-284866-4, 2311507-4, 2311508-2, 2311508-4, 1-2311508-4, 1355181, 1-1355181-2, 3-1355181-2, 1-1355181-3, 1-1355181-4, 1-1355181-5, 1-1355181-6, 2-1355181-6, 1-1355181-7, 1-1355181-8, 2-1355181-8, 1-1355181-9, 1-1355181-0, 1-1355182-2, **x-1355182-y (x=1-2,y=1-8)**, **x-2402969-y (x=3, y=0-9)**, **x-2402726-Y (X = 0-2, Y = 0-8)**, **x-2402731-Y (X = 0-5, Y = 0, 4-9)**, **x-2312431-Y (X = 0, 2, Y = 0-4,6,8,9)**.

PRODUCT COVERED (Cont'd):

USR - Cat. Nos. 1987611, 1-1987611-2, 3-1987611-6, 1534557, 2-1534577-0, 6-1534577-0, 7-1534577-0, **x-2402729-y** (x=0-5, y=0-9), **x-2402722-y** (x=0-4, y=0-9), **X-2403117-Y** (X=0,2, Y= 3,4,6,7,9), **x-2403112-y** (x=3, y=0,3-9), **x-829869-y** (x=3, y=0-9), **x-2403118-y** (x=1,y=0,3-9), **x-966195-y** (x=1,y=0-9), **x-2403114-y** (x=2-3,y=3,5,6,7,9), **x-2402970-y** (x=3,y=0,1,3,5,7,9), **x-2404992-y** (x=1,y=3,4,6), **x-2402717-y** (x=0-3,y=3), **x-2402732-y**(x=0-8,y=0,3-9), **0-2404973-3**, **0-2404974-3**, **0-293133-3**, **x-2404984-y** (x=1-3,y=3,5,6,7,9), **x-2404986-y** (x=1,y=1,3,5,7,9), **x-2404987-y** (x=1,y=3,7), **2-2404987-7**, **x-2403116-y** (x=1-2,y=2-9,0), **x-2404999-y** (x=1-2,y=1-8), **x-2311500-y** (x=0-2, y=0,2-9), **X-2311501-Y** (X = 0-9, Y=0-9), **X-2311504-Y** (X=0-9, Y=0-9), **X-2311505-Y** (X = 0-9, Y = 0-9), **X-2311506-Y**(X = 0-9, Y = 0-9), **X-2311507-Y** (X = 0-9, Y = 0-9), **X-2311509-Y** (X = 0-9, Y = 0-9), **X-2311510-Y** (X = 0-9, Y = 0-9), **X-2311511-Y** (X = 0-9, Y = 0-9), **X-2311513-Y**, **X-2311514-Y**, **X-2311516-Y**, **x-2312430-y** (x=0-1,y=0,3-9), **x-2312431-y** (x=0,2 y= 0-9), **X-2319801-Y** (X = 0-9, Y = 0-9), **2311503-2**, **X-2311512-Y** (x = 0-9, y = 0-9), **X-240726-Y** (x =0-9, y = 0-9), **x-2404188-y** (x = 0-9, y = 0-9), **X-240726-Y** (x =0-9, y = 0-9), **x-2311502-y** (x = 0-9, y = 0-9).

Specific Cat. Nos. May be provided with prefix "X" and/or suffixes "Y" where X indicates the polarization and is a number 0 to 9 and Y designates the position and is a number 0-9.

GENERAL:

These devices are multi-pole headers and attachment plugs employing contacts of the solder and insulation displacement type for use with printed circuit boards and wires where the acceptability of the combinations is determined by Underwriters Laboratories Inc.

USR - Indicates evaluation to the standard indicated in the test record of this report.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

Use - For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

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

1. These devices should be used only where they will not interrupt the current.

2. These devices have not been tested for current- carrying capability except for Model X-293207-Y which has been evaluated for a 2 A rating with a maximum recorded temperature of 33.8 degrees.

3. The suitability of the mounting means shall be determined in the end use.

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4. The electrical and mechanical suitability of the wiring terminals shall be determined in the end use.

5. The placement of these devices within the equipment enclosure should be such that spacings between the live parts and the equipment are suitable for the particular application.

6. The adjacent and non adjacent poles of all fully loaded connectors except model X-293207-Y may be used at potentials not exceeding 63 Volts. The adjacent and non adjacent poles of fully loaded connector model X-293207-Y may be used at potentials not exceeding 65 Volts. Dielectric testing has been performed.

The adjacent and non adjacent poles of a partially loaded connector (Pins 1,3,5,7...etc) may be used at potentials not exceeding 250 Volts. Dielectric testing has been performed.

7. The electrical and mechanical contact between the connector and the printed circuit board is to be judged in the end-use equipment.

8. The electrical and mechanical contact between the IDC connector and the wire is to be judged in the end-use equipment.

9. The suitability of the insulating materials used in the molded bodies shall be judged in the end-use equipment.

10. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials.