

File E28476
Project 99ME37131

August 19, 1999

REPORT

on

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

AMP Incorporated
Harrisburg, PA

Copyright © 1999 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce this Report provided it is reproduced in its entirety.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce that portion of this Report consisting of this Cover Page through Page 2.

GENERAL:

These devices are multi-pole receptacle and plug connectors employing contacts of the solder and crimp termination type for use with printed circuit boards and discrete wire where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Electrical Ratings:

Cat Nos.	Wire Size (AWG)	Max Voltage AC/DC (V)	Current (A)
1123722	18	250	7.5
1123722	22-20	250	5
*1123723, 2375267, 237568, 2384273, 2384274, 2403362- 9, 2375239, 2375269, 2384269, 2384271, 2410284, 2-2410284-3, 1-1744055-2, X-1744524-Y	18	250	7.5
1123723, 2375267, 237568, 2384273, 2384274, 2403362- 9, 2375239, 2375269, 2384269, 2384271, 2410284, 2-2410284-3	22-20	250	5
*1123823	18	250	8.0
* 1123823, 1-1744055-2, X-1744524-Y	20	250	6
* 1123823, 1-1744055-2, X-1744524-Y	22	250	5

Disconnecting Use - see Sec Gen for required marking.

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**

File E28476 Vol. 23 Sec. 63 Page 1-2 Issued: 1999-08-19
 Vol. 47 Sec. 7 New: 2023-02-14
 Vol. 94 Sec. 1
 Vol. 114 Sec. 3
 Vol. 116 Sec. 40
 and Report

NOMENCLATURE:

The Cat Nos. X-1744511-Y are designated as follows:

Example: $\frac{X}{I}$ $\frac{Y}{II}$

I: - X=0-1 and represents the number of contact positions.

II: - Y=0-9 and represents the number of contact positions.

The Cat Nos. X-1744524-Y are designated as follows:

Example: $\frac{X}{I}$ $\frac{Y}{II}$

I: - X=0-9 and represents the number of contact positions, different contact omissions, and keying options.

II: - Y=1-9 and represents the number of contact positions, different contact omissions, and keying options.

and Report

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

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

Condition of Acceptability - In order to be judged acceptable as 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. Cat. No. 1123722, mated with 1123723 has been investigated for a current of 5.0 A carried by each pole, when using 22 AWG wire, with a maximum temperature rise of 25.8°C.
3. Cat. No. 1123722, mated with 1123723 has been investigated for a current of 5.0 A carried by each pole, when using 20 AWG wire, with a maximum temperature rise of 15.5°C.
4. Cat. NO. 1123722, mated with 1123723 has been investigated for a current of 7.5 A carried by each pole, when using 18 AWG wire, with a maximum temperature rise of 27°C.

and Report

5. Cat. No. 1123823, mated with 1123824 has been investigated for a current of 5.0 A carried by each pole, when using 22 AWG wire, with a maximum temperature rise of 12.2°C.

6. Cat. No. 1123823, mated with 1123824 has been investigated for a current of 6.0 A carried by each pole, when using 20 AWG wire, with a maximum temperature rise of 12.2°C.

7. Cat. No. 1123823, mated with 1123824 has been investigated for a current of 8.0 A carried by each pole, when using 18 AWG wire, with a maximum temperature rise of 15.0°C.

7A. These devices have been subjected to the Temperature test with the rated currents and maximum temperature rise and recorded temperature (adjusted to 25°C ambient) values tabulated below:

Cat Nos.	Current, A	Maximum Temperature °C	
		Rise	Recorded Temperature
1-1744055-2	7.5	24.6	49.6
	6	23.0	48.0
	5	23.6	48.6

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

9. 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.

and Report

17. Right angle header, Cat. No. x-1744428-y where x is either "1" or omitted and y can be any number from 0-9, shall only be molded of Tyco Raw Material P/N 1573697.
18. 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 No.	Insulating Material (#)	Flame Class	HWI	HAI	RTI, °C	Max Operating Temp, °C
Economy Power	A	V-0	4	0	130	130
Economy Power	B	V-0	3	0	140	140
Economy Power	C	V-0	4	0	130	130
Economy Power	D	V-0	5	1	95	95
Economy Power	E	V-2	4	0	130	130
Economy Power X-1744511-Y X-1744524-Y	F	V-0	4	0	140	140
Economy Power	G	V-2	3	0	130	130
Economy Power	H	V-0	4	1	130	130
Economy Power Header	I	V-0	0	0	140	140
Economy Power Plug housing	J	V-0	-	-	130	130
Economy Power Header	K	V-0	4	3	130	130
Economy Power Header	L (@1)	V-0	4	0	130	130
Economy Power Plug housing	M (@2)	V-0	4	0	130	130
Economy Power Header	J (@3)	V-0	4	0	130	130
Economy Power Header Assy	B (@4) (@5)	HB	3	0	140	140
Cat. Nos X-2375267-Y, 237568-X, X-2384273-Y, 2384274-X, 2403362-9	N	V-0	4	3	130	130
Cat. Nos X-2375239-Y, X-2375269-Y, X-2384269-Y, 2384271-X	O	V-0	4	3	130	130
Cat. Nos. 2410284-X, 2-2410284-3	P	V-0	0	0	130	130

(#) - Code for Insulating Body Material.

- A. Tyco Raw Material P/N 1573206
 - 1. Dielectric strength (kV/mm): 28
 - 2. CTI: 0
- B. Tyco Raw Material P/N 704788
 - 1. Dielectric strength (kV/mm): 43
 - 2. CTI: 3
- C. Tyco Raw Material P/N 1573755
 - 1. Dielectric strength (kV/mm): 27
 - 2. CTI: 3
- D. Tyco Raw Material P/N 703550
 - 1. Dielectric strength (kV/mm): 31
 - 2. CTI: 0

- E. Tyco Raw Material P/N 705304
 - 1. Dielectric strength (kV/mm):
 - 2. CTI: 2
- F. Tyco Raw Material P/N 1573697
 - 1. Dielectric strength (kV/mm):
 - 2. CTI: 2
- G. Tyco Raw Material P/N 1573161
 - 1. Dielectric strength (kV/mm):
 - 2. CTI: 2
- H. Tyco Raw Material P/N 2136278
 - 1. Dielectric strength (kV/mm): 25
 - 2. CTI: 0
- I. Tyco Raw Material P/N 2136263
 - 1. Dielectric strength (kV/mm): 6.3
 - 2. CTI: 1
- J. Tyco Raw Material P/N 703416
 - 1. Dielectric strength (kV/mm): 28
 - 2. CTI: 0
- K. Tyco Raw Material P/N 1573551
 - 1. Dielectric strength (kV/mm): -
 - 2. CTI: 2
- L. Tyco Raw Material P/N 1573140
 - 1. Dielectric strength (kV/mm): -
 - 2. CTI: 3
- M. Tyco Raw Material P/N 2136597
 - 1. Dielectric strength (kV/mm): -
 - 2. CTI: 3
- *N. Tyco Raw Material P/N 1573551
 - 1. Dielectric strength (kV/mm): 28
 - 2. CTI: 2
- *O. Tyco Raw Material P/N 2401706
 - 1. Dielectric strength (kV/mm): 28
 - 2. CTI: 2
- *P. Tyco Raw Material P/N 705999
 - 1. Dielectric strength (kV/mm): 8
 - 2. CTI: 1

*@1: Economy Power Connector, Header, Vertical Single Row, 3.96 Pitch, 12 Pole max (PNs **shown** in Ill. 6 only)

@2: Economy Power Plug housing, 3.96 Pitch, 11 Pole max (PNs showed in ILL. 7 only)

@3: Economy Power Header, 3.96 Pitch, 12 Pole max (PNs showed in ILL. 8 only)

File E28476

Vol. 23 Sec. 63
Vol. 47 Sec. 7
Vol. 94 Sec. 1
Vol. 114 Sec. 3
Vol. 116 Sec. 40

Page 2C

Issued: 1999-08-19

New: 2019-11-01

and Report

@4: Economy Power Connector, Header, Vertical Single Row, 3.96 Pitch, 11 Pole max for full pin, 9 pole max for selective pin (PNs showed in ILLs. 10 and 11 only).

@5: With colorant (Tyco P/N 704760).