File E28476 Vo

Vol 36 Sec. 1 and Report

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Issued: 4-9-9Ø Revised: 7-11-95

DESCRIPILON

PRODUCT COVERED:

Component Connectors "AMPOWER" Series, Plugs and Connectors.

General:

These "AMPOWER" devices are multipole plug and receptacle connectors employing contacts of the crimp, solder and press-fit termination type for use with printed circuit boards, half or full width flat copper cable, and/or ribbon cable. These devices are provided with snap-on insulating covers and mate with "AMPOWER" plug contacts.

TOOL ING:

The plug contacts are factory assembled on flat copper cable using AMP, Inc. "AMPOWER" wave crimping tooling, Model T-9006, or Cat. No. 768543-1.

RATING:

The plug contact devices are rated:

- 1) 35 A through each pole of half-width (0.010 in thick) 2-conductor split flat copper cable.
- 2) 70 A through full-width (0.010 in thick) single-conductor split flat copper cable.
- 3) 50 A per conductor on half-width (0.020 in thick) 2-conductor split flat copper cable.
- 4) 100 A through full-width (0.020 in thick) single-conductor flat copper cable.

FLAT CABLE DESCRIPTIONS:

<u>Description</u>	<u>Conductors</u>	Thickness
Split (Half-Width)	2	ø.ø1ø in
Split (Half-Width)	2	Ø.Ø2Ø in
Solid (Full-Width)	1	Ø.Ø1Ø in
Solid (Full-Width)	1	Ø.Ø2Ø in

Note: Solid is 1 in wide. Split is 1 in wide (two 7/16 in wide conductors with 1/16 in Tefzel insulating spacing. E.O.

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ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

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

<u>Conditions of Acceptability</u> - 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. These devices have been investigated for a max current of 100 A with a max temperature rise of 30 degrees C.
- 3. The suitability of the mounting means shall be determined in the end-use.
- 4. 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.
- 5. The terminals and insulating covers may be used at potentials not exceeding 600 V based on the Dielectric Voltage Withstand Tests that were performed.

The adjacent 2-conductor split flat-cable halves are assumed to be at the same polarity, and when used in opposite polarity applications, spacings between the terminals shall be evaluated in the end-use equipment and the need to perform Dielectric Voltage Withstand Testing should be considered.

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

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7. The factory assembled contacts have been investigated for the following flat cable ranges and max tensile forces.

Part No.	Flat Cable Range	Tensile Force (lbs)
765215-1	Ø.Ø1Ø in	92 lbs
765215-1	Ø.Ø2Ø in	15Ø lbs

- 8. The suitability of use of flat cable conductor of other styles or dimensions shall be determined in the end-use.
- 9. These connectors have been evaluated in combination with Recognized Component appliance wiring material (AVLV2) Tefzel insulated copper conductor rated 300 V, 150 degrees C max in thicknesses of 0.010 and 0.020 in, and solid (1-conductor) and split (2-conductor) sizes.
- 10. The suitability of the insulating materials used in the molded bodies shall be judged in the end-use equipment.
- 11. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used interchangeably at a max temperature of 120 degrees C.

E.O. J.T.

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