



# Series 100 thru 111 DIP Jumpers

## FEATURES

- Wide Array of DIP Jumper Configurations and Wiring Possibilities
- Reliable, Electronically-tested Solder Connections
- Protective Covers Ultrasonically-welded with Strain Relief
- Easy Identification and Tracing with 10-color Cable

## GENERAL SPECIFICATIONS

- **HEADER BODY AND COVER:** black UL 94V-0 4/6 Nylon
- **HEADER PINS:** Brass 1/2-hard
- **STANDARD PIN PLATING:** 10 $\mu$  [0.25 $\mu$ ] min. Au per MIL-G-45204 over 50 $\mu$  [1.27 $\mu$ ] min. Ni per QQ-N-290
- **OPTIONAL PLATING:** 200 $\mu$  [5.08 $\mu$ ] min. matte Sn per ASTM B545-97(2004)e1 over 50 $\mu$  [1.27mm] min. Ni per QQ-N-290; **—OR—** 200 $\mu$  [5.08 $\mu$ ] 90/10 Sn/Pb per MIL-T-10727 Type I over 50 $\mu$  [1.27 $\mu$ ] min. Ni per QQ-N-290
- **CABLE INSULATION:** UL style 2697 Polyvinyl Chloride (PVC)
- **CABLE LAMINATE:** clear PVC, self-extinguishing\*
- **0.050 [1.27] PITCH CONDUCTORS:** 28-AWG, 7/36-strand, tinned Cu per ASTM B 33
- **0.039 [0.99] PITCH CONDUCTORS:** 26-AWG, 7/34-strand)
- **CABLE CURRENT RATING:** 1 amp at 10°C [50°F] above ambient
- **CABLE VOLTAGE RATING:** 300V
- **CABLE TEMPERATURE RATING:** 176°F [80°C]
- **CABLE CAPACITANCE:** 13.0pF/ft. [42.7pF/meter] nominal at 1MHz\*
- **CROSSTALK:** 10-ft sample, 5ns rise time with 2 lines driven; near end 4.7%; far end 4.3% nominal\*
- **PROPAGATION DELAY:** 1.5ns/ft. [4.9ns/meter] nominal\*
- **INSULATION RESISTANCE:** 1010 $\Omega$  (10 ft. [3 meters] min.)

## MOUNTING CONSIDERATIONS

- **SUGGESTED PCB HOLE SIZE:** 0.033  $\pm$  0.002 [0.86  $\pm$  0.05] dia.  
\* Applies to 0.050 [1.27] Pitch Cable Only

### NUMBER OF CONDUCTORS

| Available Sizes | Centers "C"   | Dim. "D"      |
|-----------------|---------------|---------------|
| 4 thru 20       | 0.300 [7.62]  | 0.395 [10.03] |
| 22              | 0.400 [10.16] | 0.495 [12.57] |
| 24, 28, 40      | 0.600 [15.24] | 0.695 [17.65] |



## ORDERING INFORMATION

**XX-XXXX-XXX XXX**

Optional Header Pin Plating  
T = Sn  
TL = Sn/Pb  
TW = Twisted Pair Cable  
ST = Stripped, Sn-dipped  
(106-111 Series)

Jumper Series

Cable Length (inches)  
2" = 002 (min.) [50.88]  
2.5" = 002.5

No. of Conductors  
(see Table)

## SINGLE-END DIP JUMPER WIRE LIST

| Series 106, 108, 110 |                   | Series 107, 109, 111 |                   |
|----------------------|-------------------|----------------------|-------------------|
| Wire Number          | Header Pin Number | Wire Number          | Header Pin Number |
| 1                    | 1                 | 1                    | 1                 |
| 2                    | 8                 | 2                    | 2                 |
| 3                    | 2                 | 3                    | 3                 |
| 4                    | 7                 | 4                    | 4                 |
| 5                    | 3                 | 5                    | 5                 |
| 6                    | 6                 | 6                    | 6                 |
| 7                    | 4                 | 7                    | 7                 |
| 8                    | 5                 | 8                    | 8                 |

ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES:  $\pm$ 0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FOR OTHER CONFIGURATIONS, SEE [DATA SHEET 11007](#)

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

CUSTOMIZATION: ARIES SPECIALIZES IN CUSTOM DESIGN AND PRODUCTION. SPECIAL MATERIALS, PLATINGS, SIZES, AND CONFIGURATIONS CAN BE FURNISHED, DEPENDING ON QUANTITY.

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Rev. 8.1  
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# Series 100 thru 111 DIP Jumpers

**Series 100**



Numbers  
shown pin  
side, for  
reference only



**Series 101**

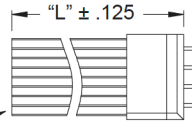


**Series 106**



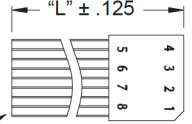
WIRE 1

**Series 107**



WIRE 1

**Series 108**



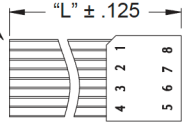
WIRE 1

**Series 109**



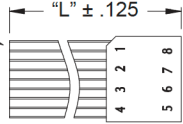
WIRE 1

**Series 110**



WIRE 1

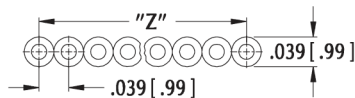
**Series 111**



WIRE 1

**Cable Detail**

(Series 107/109/111)



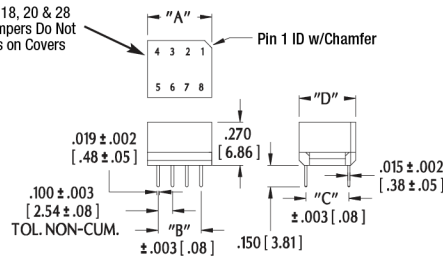
$$"Z" = (\text{NO. OF CONDUCTORS} - 1) \times .039 [ .99 ]$$

$$"A" = (\text{No. of Conductors} \times 0.050 [1.27]) + 0.095 [2.41]$$

$$"B" = (\text{No. of Conductors} - 1) \times 0.050 [1.27]$$

$$"L" \pm 0.125$$

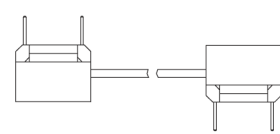
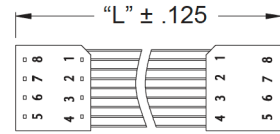
**Header Detail**  
(Series 100, 101)



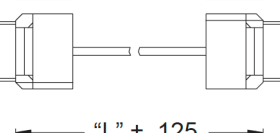
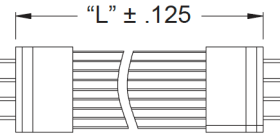
NOTE: 10, 12, 18, 20 & 28  
Conductor Jumpers Do Not  
Have Numbers on Covers

Pin 1 ID w/Chamfer

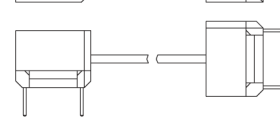
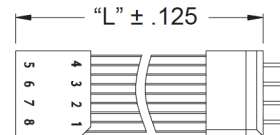
**Series 102**



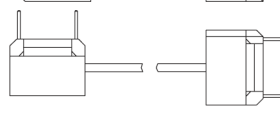
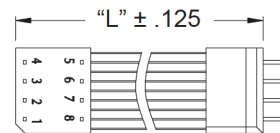
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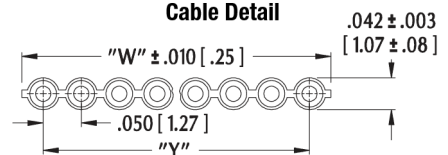
**Series 104**



**Series 105**



**Cable Detail**



$$"W" = (\text{NO. OF CONDUCTORS} \times 0.050 [1.27]) + .005 [ .08 ]$$

$$"Y" = (\text{NO. OF CONDUCTORS} - 1) \times 0.050 [1.27]$$

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