



# Series 513 Lo-PRO® file Socket w/Collet Contacts & Solder Pin Tails

## FEATURES

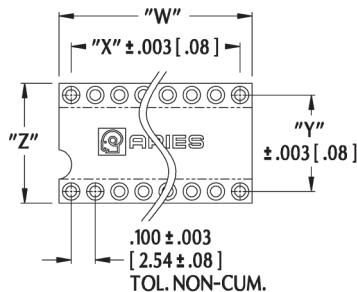
- Available with Solder Pin Tails
- Choose from Several Sizes and Plating Options
- For Wire Wrap Pins, see [Data Sheet 12012](#)

## GENERAL SPECIFICATIONS

- **BODY MATERIAL:** Black UL 94V-0 glass-filled 4/6 Nylon
- **SHELL MATERIAL:** Brass 360 1/2-hard per UNS C36000 ASTM B16/B16M-05
- **SHELL PLATING:** 10μ [0.25μ] min. Au per MIL-G-45204 or 200μ [5.08μ] min. 93/7 Sn/Pb per ASTM B545 –OR– 200μ [5.08μ] min. Sn per ASTM B545 Type 1 over 100μ [2.54μ] min. Ni per SAE AMS-QQ-N-290B
- **4-FINGER COLLET MATERIAL:** BeCu per UNS C17200 ASTM B194-08
- **COLLET CONTACT PLATING:** 200μ [5.08μ] min. 93/7 Sn/Pb per ASTM B545 –OR– 200μ [5.08μ] min. Sn per ASTM B545 Type 1 –OR– 10μ [0.25μ] Au per MIL-G-45204 over 50μ [1.27μ] min. [1.27μ] Ni per SAE AMS-QQ-N-290 heavy 30μ [0.76μ]
- **CONTACT CURRENT RATING:** 3 amps
- **INSERTION FORCE:** 180g/pin, based on 0.018 [0.46] dia. test lead
- **WITHDRAWAL FORCE:** 90g/pin, based on 0.018 [0.46] dia. test lead
- **NORMAL FORCE:** 140g/pin, based on 0.018 [0.46] dia. test lead
- **OPERATING TEMPERATURE:** 221°F [105°C] Sn & Sn/Pb plating; 257°F [125°C] Au plating
- **ACCEPTS LEADS:** 0.015-0.025 [0.38-0.64] dia., 0.100-0.146 [2.54-3.71] long

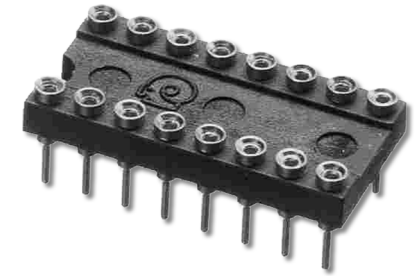
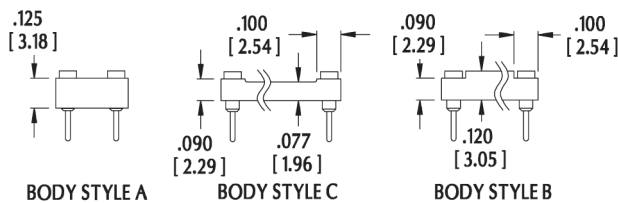
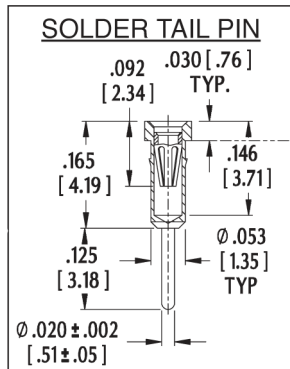
## MOUNTING CONSIDERATIONS

- **SUGGESTED PCB HOLE SIZE:** 0.030 ±0.002 [0.76 ±0.05] dia.



"W" = NO. OF PINS PER ROW x 0.100 [2.54]

"X" = (NO. OF PINS PER ROW - 1) x 0.100 [2.54]



## ORDERING INFORMATION

**XX-X 513-XXXX**

### Collet/Shell Plating Options

- 10 = Au Collet/Sn Shell
- 10H = 30μ" Au Collet/Sn Shell
- 10T = Sn Collet/Sn Shell
- 10TL = Sn/Pb Collet and Shell
- 11 = Au Collet/Au Shell
- 11H = 30μ" Au Collet/AuShell

### Series

### Row-to-Row Spacing (Dim. "Y")

- 2 = 0.200 [5.08]
- 3 = 0.300 [7.62]
- 4 = 0.400 [10.16]
- 6 = 0.600 [15.24]
- 9 = 0.900 [22.86]

### No. of Pins

(See Table)

| Centers "Y"   | Dim. "Z"      | Body Style | Available Sizes       |
|---------------|---------------|------------|-----------------------|
| 0.200 [5.08]  | 0.300 [7.62]  | A          | 2 thru 10             |
| 0.300 [7.62]  | 0.400 [10.16] | C, B       | 2 thru 20, 22 thru 40 |
| 0.400 [10.16] | 0.500 [12.70] | C          | 2 thru 22             |
| 0.600 [15.24] | 0.700 [17.78] | C, B       | 2 thru 40, 42 thru 48 |
| 0.900 [22.86] | 1.000 [25.40] | B          | 2 thru 64             |

ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FOR COLLET SOCKETS WITH WIRE WRAP PINS, SEE [DATA SHEETS 12012](#)

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.

ARIES RESERVES THE RIGHT TO CHANGE PRODUCT GENERAL SPECIFICATIONS WITHOUT NOTICE

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Rev. 8.3  
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