



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

## FEATURES

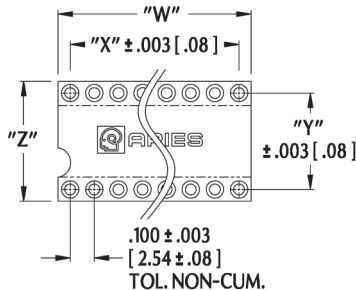
- Available with Solder Pin Tails
- Choose from Several Sizes and Plating Options
- For Wire Wrap Pins, see [Data Sheet 12012](#)

## 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

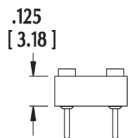
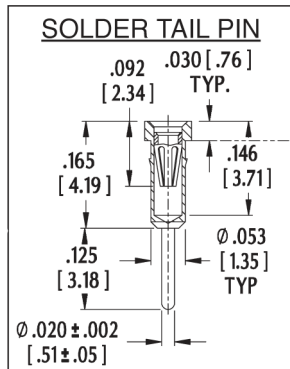
## MOUNTING CONSIDERATIONS

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

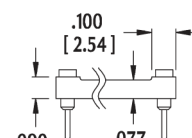


"W" = NO. OF PINS PER ROW x 0.100 [2.54]

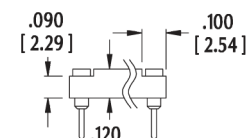
"X" = (NO. OF PINS PER ROW - 1) x 0.100 [2.54]



BODY STYLE A



BODY STYLE C



BODY STYLE B

## 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

PRINTOUTS OF THIS DOCUMENT MAY BE OUT-OF-DATE AND SHOULD BE CONSIDERED UNCONTROLLED



**ARIES**  
ELECTRONICS, INC.

2609 Bartram Road • Bristol, PA 19007-6810 USA

TEL 215-781-9956 • FAX 215-781-9845

[WWW.ARIESELEC.COM](http://WWW.ARIESELEC.COM) • [INFO@ARIESELEC.COM](mailto:INFO@ARIESELEC.COM)



12011  
Rev. 8.3  
1 of 1