



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

## FEATURES

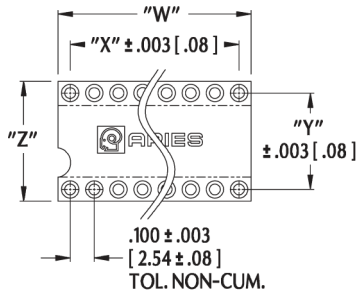
- Available with Solder Pin Tails
- Choose from Several Sizes and Plating Options
- For Wire Wrap Pins, see [Data Sheet 12012](#)

## GENERAL SPECIFICATIONS

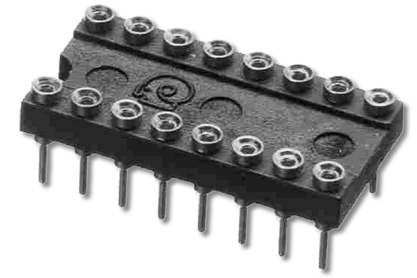
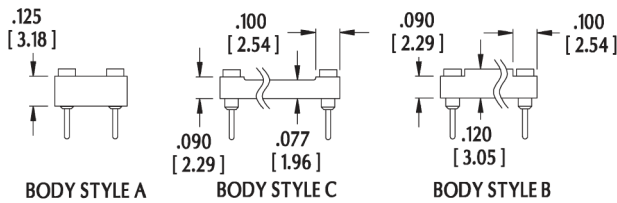
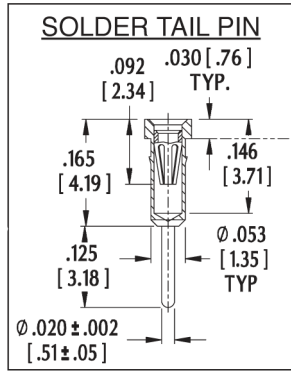
- **BODY MATERIAL:** Black UL 94V-0 glass-filled 4/6 Nylon
- **SHELL MATERIAL:** Brass 360 1/2-hard per UNS C36000 ASTM B16/B16M-05
- **SHELL PLATING:** 10 $\mu$  [0.25 $\mu$ ] min. Au per MIL-G-45204 or 200 $\mu$  [5.08 $\mu$ ] min. 93/7 Sn/Pb per ASTM B545 –OR– 200 $\mu$  [5.08 $\mu$ ] min. Sn per ASTM B545 Type 1 over 100 $\mu$  [2.54 $\mu$ ] min. Ni per SAE AMS-QQ-N-290B
- **4-FINGER COLLET MATERIAL:** BeCu per UNS C17200 ASTM B194-08
- **COLLET CONTACT PLATING:** 200 $\mu$  [5.08 $\mu$ ] min. 93/7 Sn/Pb per ASTM B545 –OR– 200 $\mu$  [5.08 $\mu$ ] min. Sn per ASTM B545 Type 1 –OR– 10 $\mu$  [0.25 $\mu$ ] Au per MIL-G-45204 over 50 $\mu$  [1.27 $\mu$ ] min. [1.27 $\mu$ ] Ni per SAE AMS-QQ-N-290 heavy 30 $\mu$  [0.76 $\mu$ ]
- **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  $\pm$  0.002 [0.76  $\pm$  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 = 30 $\mu$ " Au Collet/Sn Shell
  - 10T = Sn Collet/Sn Shell
  - 10TL = Sn/Pb Collet and Shell
  - 11 = Au Collet/Au Shell
  - 11H = 30 $\mu$ " 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" $\pm$ 0.010 [0.254]	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:  $\pm$ 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

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## [Aries Electronics:](#)

[08-3513-00](#) [10-3513-10](#) [12-3513-11](#) [14-3513-00](#) [16-3513-00](#) [18-3513-00](#) [20-3513-00](#) [40-9513-10](#) [36-6513-11H](#)  
[32-6513-10T](#) [32-6513-10H](#) [32-3513-10T](#) [32-3513-10H](#) [32-9513-10H](#) [32-9513-10T](#) [32-9513-11H](#) [32-3513-11H](#) [32-](#)  
[6513-11H](#) [10-2513-11H](#) [10-6513-11H](#) [10-4513-11H](#) [10-9513-11H](#) [10-9513-10H](#) [10-9513-10T](#) [10-6513-10H](#) [10-](#)  
[6513-10T](#) [10-2513-10T](#) [10-2513-10H](#) [24-6513-10T](#) [24-6513-10H](#) [24-3513-10T](#) [24-3513-10H](#) [24-6513-11H](#) [24-](#)  
[3513-11H](#) [50-9513-10](#) [50-9513-11](#) [16-513-10T](#) [28-3513-11H](#) [28-6513-11H](#) [28-6513-10H](#) [28-6513-10T](#) [28-3513-](#)  
[10H](#) [28-3513-10T](#) [06-6513-10T](#) [06-6513-10H](#) [06-2513-10H](#) [06-2513-10T](#) [10-9513-10](#) [10-9513-11](#) [06-9513-10T](#)  
[06-6513-11H](#) [06-2513-11H](#) [24-3513-10](#) [24-6513-10](#) [24-6513-11](#) [24-3513-11](#) [28-3513-11](#) [28-6513-11](#) [28-6513-10](#)  
[28-3513-10](#) [20-6513-11](#) [20-6513-10](#) [26-3513-10](#) [26-6513-11](#) [26-3513-11](#) [14-6513-10T](#) [14-6513-10H](#) [22-4513-11](#)  
[22-3513-11](#) [22-3513-10](#) [22-4513-10](#) [14-6513-11H](#) [20-6513-11H](#) [20-9513-11H](#) [20-9513-10T](#) [20-9513-10H](#) [20-6513-](#)  
[10H](#) [20-6513-10T](#) [40-9513-11](#) [36-3513-11H](#) [36-3513-10H](#) [36-3513-10T](#) [36-6513-10H](#) [36-6513-10T](#) [34-3513-11H](#)  
[48-6513-10](#) [48-6513-11](#) [34-3513-10T](#) [34-3513-10H](#) [40-3513-10](#) [40-6513-10](#) [40-3513-11](#) [40-6513-11](#) [12-6513-10H](#)  
[12-6513-10T](#) [12-6513-11H](#) [64-9513-10](#) [64-9513-11](#) [60-9513-11](#) [60-9513-10](#)