



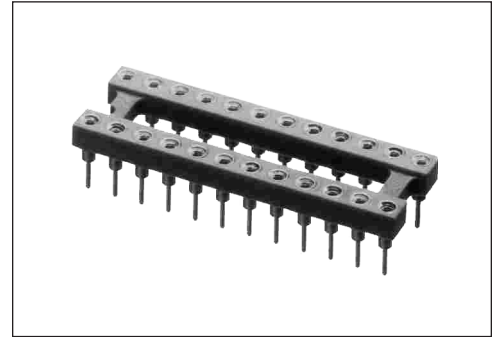
# Series 518 Open Frame Collet Socket w/Solder Pin Tails

## FEATURES

- Open Frame allows efficient utilization of board space with optimized cooling
- Choose from several pin styles
- Compatible with automatic insertion equipment
- Side-to-side and end-to-end stackable

## GENERAL SPECIFICATIONS

- BODY MATERIAL: black UL 94V-0 glass-filled 4/6 Nylon
- PIN BODY: Brass 360 1/2-hard per UNS C36000 ASTM B16-00
- PIN BODY 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-290
- 4-FINGERED COLLET CONTACT: BeCu per UNS C17200 ASTM B194-01
- 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. Ni per SAE AMS-QQ-N-290
- AVAILABLE PLATING: Heavy Au 30 $\mu$  [0.76 $\mu$ ]
- CONTACT CURRENT RATING: 3 amps
- OPERATING TEMPERATURE: 221°F [105°C] Sn and Sn/Pb plating 257°F [125°C] Au plating
- INSERTION FORCE: 180g/pin
- WITHDRAWAL FORCE: 90g/pin
- NORMAL FORCE: 140g/pin
- MIDGET PIN INSERTION FORCE: 370g/pin
- MIDGET PIN WITHDRAWAL FORCE: 150g/pin
- MIDGET PIN NORMAL FORCE: 240g/pin, based on a 0.018 [0.46] dia. test lead
- ACCEPTS LEAD LENGTHS: from 0.100 [2.54] min. and 0.015-0.025 [0.38-0.64] dia.
- ACCEPTS MIDGET PIN LEAD LENGTHS: from 0.080 [2.03] and up to 0.022 [0.56] dia.



**CUSTOMIZATION:** In addition to the standard products shown on this page, Aries specializes in custom design and production. Special materials, platings, sizes, and configurations can be furnished, depending on the quantity. **NOTE:** Aries reserves the right to change product general specifications without notice.

## ORDERING INFORMATION

XX-X 518-1 X X

No. of Pins ———  
See Table

Row-to-Row Spacing ———  
3: "Y" = 0.300 [7.62]  
4: "Y" = 0.400 [10.16]  
6: "Y" = 0.600 [15.24]  
9: "Y" = 0.900 [22.86]

Series ———  
Solder Pin Tail ———

### Options

- H = Heavy Au on Collet
- T = Sn on Collet
- M = Midget Solder Tail (available Au Collet/Sn Shell only)
- E = Extra Long Solder Tail

### Plating

- 0 = Au Collet/Sn Shell
- 1 = Au Collet/Au Shell

## MOUNTING CONSIDERATIONS

- SUGGESTED PCB HOLE SIZE FOR SOLDER PIN TAIL AND EXTRA LONG PIN: 0.030  $\pm$  0.002 [0.76  $\pm$  0.05] dia.
- SUGGESTED PCB HOLE SIZE FOR MIDGET PIN: 0.040  $\pm$  0.002 [1.02  $\pm$  0.05] dia.



Bristol, PA 19007-6810 USA  
TEL (215) 781-9956 • FAX (215) 781-9845  
WWW.ARIESELEC.COM • INFO@ARIESELEC.COM

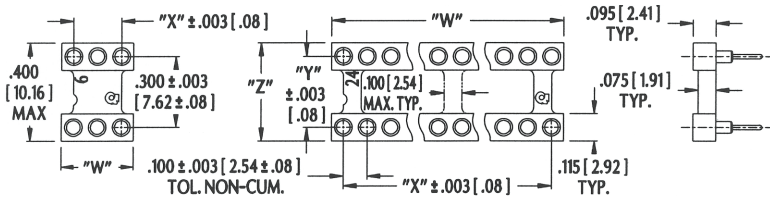


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Rev. AA



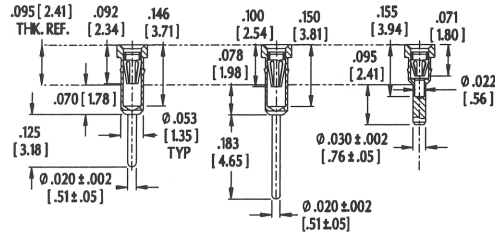
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STYLE A

STYLE B.C (2.3 RIB)

Style D (4,5 rib) not shown



Frame Style	No. of Ribs	Centers "Y"	Dim. "Z"	Available Sizes
A	1	0.300 [7.62]	0.400 [10.16]	6
B	2	0.300 [7.62] 0.400 [10.16]	0.400 [10.16] 0.500 [12.70]	8, 14, 16, 18, 20, 24 20, 22
C	3	0.300 [7.62] 0.400 [10.16] 0.600 [15.24]	0.400 [10.16] 0.500 [12.70] 0.700 [17.78]	28 24 24, 28, 32, 40, 48
D	4, 5	0.900 [22.86]	1.000 [25.40]	50, 64

ALL DIMENSIONS: INCHES [MILLIMETERS]

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

"W" (# PINS PER ROW) x 0.100 [2.54]

"X" (# PINS PER ROW - 1) x 0.100 [2.54]

OTHER COLLET PINS AVAILABLE, CONSULT...

[Data Sheet 12017](#) FOR WIRE WRAP PINS

[Data Sheet 12018](#) FOR SURFACE MOUNT PINS

[Data Sheet 12026](#) and [Data Sheet 12027](#) for OPEN FRAME CAPACITOR SOCKETS

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

## ORDERING INFORMATION

XX - X 518 - 1 XXX XXX

Pin Count (see Table)

Row-to-Row Spacing

3 "Y" = 0.300 [7.62]

4 "Y" = 0.400 [10.16]

6 "Y" = 0.600 [15.24]

9 "Y" = 0.900 [22.86]

Series

Solder Pin Tail

Optional Suffix

H = Heavy Au on Collet

T = Sn on Collet

TL = Sn/Pb on Collet

M = Midget Solder Tail - Available Au Collet, Sn Shell

MTL = Midget Solder Tail - Available Au Collet, Sn/Pb Shell Only

Plating

0 = Au Collet, Sn Shell

OE = Au Collet, Sn Shell w/Extra Long Solder Tail

OTL = Au Collet, Sn/Pb Shell

1 = Au Collet, Au Shell



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