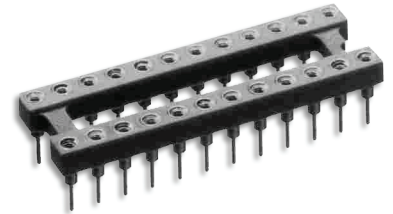




# Series 518 Open Frame Socket w/Collet Contacts & Solder Pin Tails

## 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-FINGER 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] for Sn and Sn/Pb plating, 257°F [125°C] for 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.

## ORDERING INFORMATION

**XX-X 518-X XXX XXX**

### Additional Options

- H = Heavy Au on Collet
- T = Sn on Collet
- TL = Sn/Pb on Collet
- M = Midget Solder Tail (Au Collet, Sn Shell Only)
- MTL = Midget Solder Tail (Au Collet, Sn/Pb Shell Only)
- E = Extra Long Solder Tail

### Plating \*

- 0 = Au Collet, Sn Shell
- OTL = Au Collet, Sn/Pb Shell
- 1 = Au Collet & Shell

### Termination

- 1 = Solder Pin Tail

### Series

### Row-to-Row Spacing, "Y" Dim.

- 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)

\* Consult Factory for Additional Plating Options

## 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.

ALL DIMENSIONS: INCHES [MILLIMETERS]

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

OPEN FRAME COLLET SOCKET w/SOLDER PIN TAILS, SEE [DATA SHEET 12017](#)

OPEN FRAME SURFACE MOUNT SOCKET, SEE [DATA SHEET 12018](#)

OPEN FRAME COLLET CAPACITOR SOCKET w/SOLDER PIN, SEE [DATA SHEET 12026](#)

OPEN FRAME COLLET CAPACITOR SOCKET w/WIRE WRAP, SEE [DATA SHEET 12027](#)

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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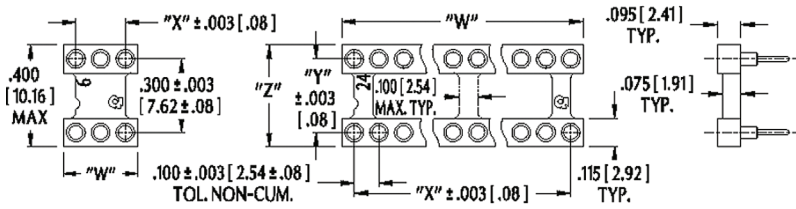
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Rev. 1.3  
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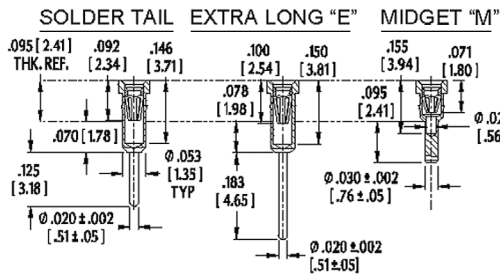
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STYLE A

STYLE B,C (2,3 RIB)  
Style D (4,5 rib) not shown



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



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

ALL DIMENSIONS: INCHES [MILLIMETERS]  
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED  
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