



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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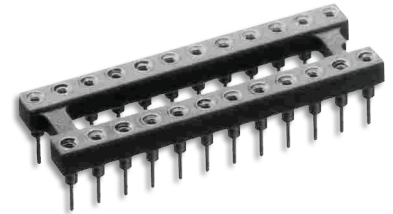




# Series 518 Open Frame Socket w/Collet Contacts & Solder Pin Tails

## 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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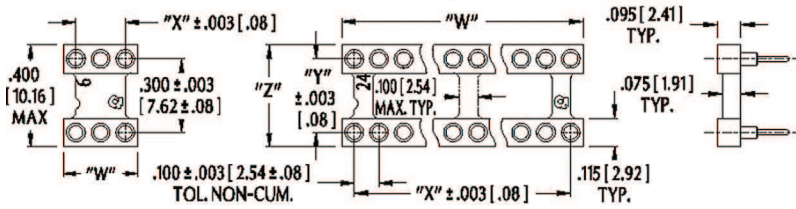
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Rev. 1.3  
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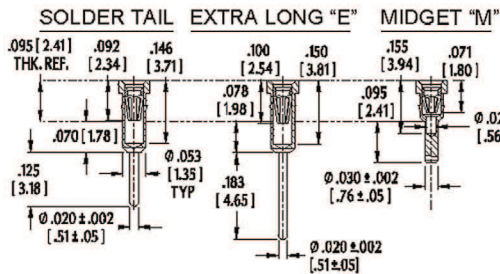
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STYLE A

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

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 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED  
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