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:** 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-290
- **4-FINGER COLLET CONTACT:** BeCu per UNS C17200 ASTM B194-01
- **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. Ni per SAE AMS-QQ-N-290
- **AVAILABLE PLATING:** heavy Au 30µ [0.76µ]
- **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.

MOUNTING CONSIDERATIONS

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

ORDERING INFORMATION

- **XX-X 518-X XXX XXX**
  - **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**
  - 3 = 0.300 [7.62]
  - 4 = 0.400 [10.16]
  - 6 = 0.600 [15.24]
  - 9 = 0.900 [22.86]

  **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

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.

ALL DIMENSIONS: INCHES [MILLIMETERS]
ALL TOLERANCES: ±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
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<table>
<thead>
<tr>
<th>Frame Style</th>
<th>No. of Ribs</th>
<th>Centers &quot;Y&quot;</th>
<th>Dim. &quot;Z&quot;</th>
<th>No. of Pins</th>
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<tbody>
<tr>
<td>A</td>
<td>1</td>
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<td>0.400 [10.16]</td>
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<td>0.400 [10.16]</td>
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<td>B</td>
<td>2</td>
<td>0.400 [10.16]</td>
<td>0.500 [12.70]</td>
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<tr>
<td>C</td>
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<td>0.400 [10.16]</td>
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<td>0.500 [12.70]</td>
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<td>0.700 [17.78]</td>
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<td>D</td>
<td>4, 5</td>
<td>0.900 [22.86]</td>
<td>1.000 [25.40]</td>
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