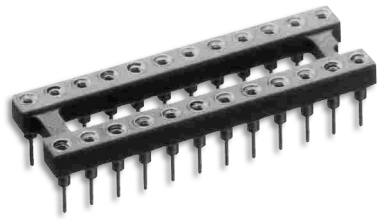
Series 518 Open Frame Socket w/Collet Contacts & Solder Pin Tails

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.

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
OE = Au Collet, Sn Shell w/Extra Long Solder Tail
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 ±0.002 [0.76 ±0.05] dia.
- **SUGGESTED PCB HOLE SIZE FOR MIDGET PIN**: 0.040 ±0.002 [1.02 ±0.05] dia.

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

CUSTOMIZATION: ARIES SPECIALIZES IN CUSTOM DESIGN AND PRODUCTION. SPECIAL MATERIALS, PLATINGS, SIZES, AND CONFIGURATIONS CAN BE FURNISHED, DEPENDING ON QUANTITY.

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ARIES® ELECTRONICS, INC.
2609 Bartram Road • Bristol, PA 19007-6810 USA
TEL 215-781-9956 • FAX 215-781-9845
WWW.ARIESELEC.COM • INFO@ARIESELEC.COM

RoHS Compliant

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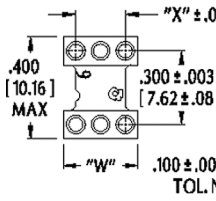
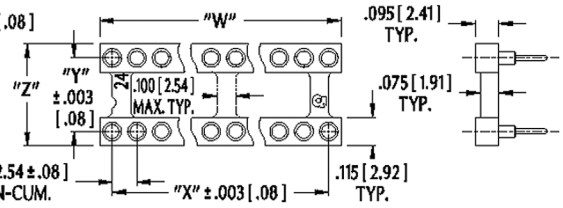
STYLE A

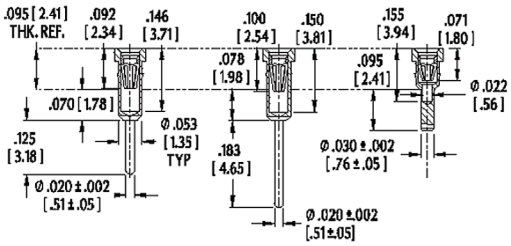


STYLE B,C (2,3 RIB)
Style D (4,5 rib) not shown



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

SOLDER TAIL EXTRA LONG "E" MIDGET "M"



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
C	3	0.300 [7.62]	0.400 [10.16]	28
		0.400 [10.16]	0.500 [12.70]	24
		0.600 [15.24]	0.700 [17.78]	24, 28, 32, 40, 48
D	4, 5	0.900 [22.86]	1.000 [25.40]	50, 64

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