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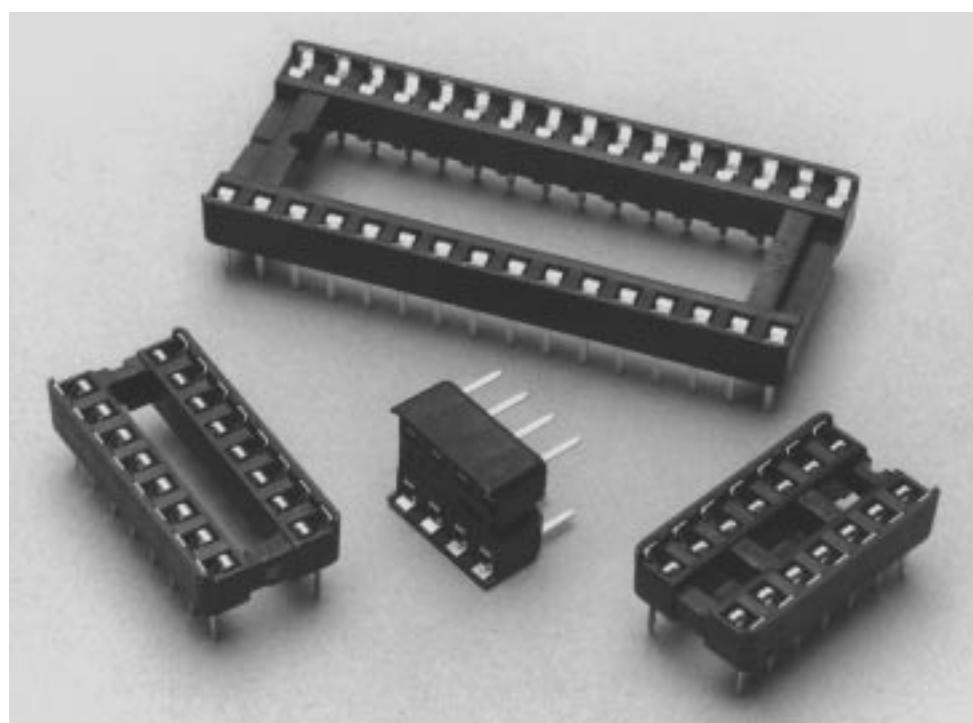
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Product Facts

- Dual wiping contacts
- Face wipe contacts for high reliability and constant, low resistance
- Anti-overstress prevents contact damage
- Large target area with tapered lead-in ramps for easy DIP insertion
- Stackable end-to-end and side-to-side (brickwalling) for high board density
- Housing standoffs and slots facilitate board cleaning
- Family of 6 through 48 positions
- Retention-style tails or straight solder tails
- Visual polarization
- Designed for automatic machine insertion — DIP-to-socket or socket-to-board (tube loaded)
- Recognized under the Component Program of Underwriters Laboratories Inc., 
- Certified by Canadian Standards Association 

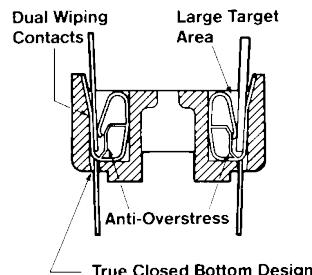
Solder Tail Dual Leaf (DL) Contact

The Dual Leaf (DL) DIP socket family provides high quality at low cost with superior handling characteristics. Sockets are available in 6- through 48-position sizes with dual wiping contacts. The large target area of the contacts and tapered side ramps in the housing promote easy entry of a DIP package. Internal anti-overstress walls on standard versions prevent contact damage. The housings are compatible with commercially available automatic insertion equipment for socket-to-board or DIP-to-socket applications.

Standoffs provide board clearance for proper cleaning after soldering. Sockets are available with straight solder tails for clinching and are "true positioned" for automatic insertion into the pc board.

Performance Characteristics:

- Rating** — Signal application only
- Contact Resistance** — 20 milliohms max. (initial)
30 milliohms max. (after test)
- Dielectric Withstanding Voltage** — 1000 VRMS min.
- Insulation Resistance** — 10,000 megohms min. (initial)
- Capacitance** — 0.5 picofarad max.
- Operating Temperature** —
-40°C to +105°C (tin)
-55°C to +125°C (gold)
- Vibration** — 15 Gs, 10-2000 Hz with 100 ma current
- Shock** — 100 Gs sawtooth, 6 shocks
- Engaging Force** — 340 grams max. (initial)
- Separating Force** — 25 grams min. per Tyco Electronics Specification 108-1066 (Standard)



Sockets accept .008—.014
[0.2—0.36] thick IC leads

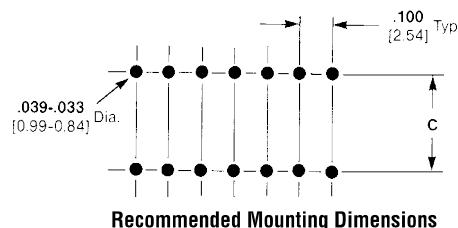
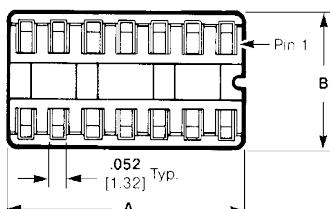
Material and Finish:

Housing — Glass-filled thermoplastic, 94V-0 rated, black

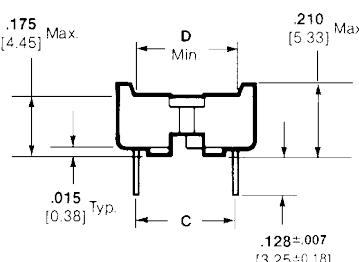
Contacts — Phosphor bronze or beryllium copper with tin or gold plating (see table)



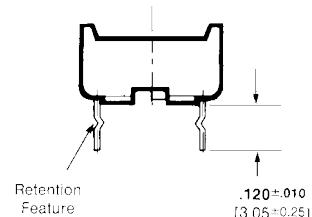
Note: All socket positions have "True Closed Bottom" design which allows no solder or flux wicking at class 1 conditions of EIA 486.



Recommended Mounting Dimensions



Sockets with Straight Solder Tails



Sockets with Retention Feature Solder Tails

| No. of Positions | Dimensions | | | | Sockets with Straight Solder Tails ¹ | | Sockets with Retention Solder Tails ¹ | | | |
|-------------------------|----------------|---------------|---------------|---------------|---|--|--|---|---------------------------|---|
| | A | B | C | D | Beryllium Copper .000030 [0.00076] ² Gold Plate | Phosphor Bronze .000015 [0.00038] ² Gold Plate | Beryllium Copper Tinned | .000030 [0.00076] ² Gold Plate | Phosphor Bronze Tinned | .000015 [0.00038] ² Gold Plate |
| 6 ³ 7.49 | .295 7.49 | .394 10.01 | .300 7.62 | .320 8.13 | 2-641296-2 | 2-641296-4 | — | — | — | — |
| 8 ³ 10.03 | .395 10.03 | .394 10.01 | .300 7.62 | .320 8.13 | 2-640463-2 | 2-640463-4 | 2-641260-1 | — | — | 2-641260-4 |
| 14 17.65 | .695 17.65 | .394 10.01 | .300 7.62 | .320 8.13 | 2-641599-2 | 2-641599-4 | 2-641609-1 | — | — | 2-641609-4 |
| 16 20.19 | .795 20.19 | .394 10.01 | .300 7.62 | .320 8.13 | 2-641600-2 | 2-641600-4 | 2-641610-1 | 2-641610-2 | — | 2-641610-4 |
| 18 22.73 | .895 22.73 | .394 10.01 | .300 7.62 | .320 8.13 | — | — | 2-641611-1 | — | — | — |
| 20 25.27 | .995 25.27 | .394 10.01 | .300 7.62 | .320 8.13 | 2-641602-2 | 2-641602-4 | 2-641612-1 | 2-641612-2 | — | 2-641612-4 |
| 24 30.35 | 1.195 30.35 | .394 10.01 | .300 7.62 | .320 8.13 | 2-641932-2 | 2-641932-4 | 2-641933-1 | — | — | — |
| 24 30.35 | 1.195 30.35 | .694 17.63 | .600 15.24 | .620 15.75 | 2-641604-2 | 2-641604-4 | 641855-1 | — | — | 2-641614-4 |
| 28 35.43 | 1.395 35.43 | .694 17.63 | .600 15.24 | .620 15.75 | 2-641605-2 | 2-641605-4 | 2-641615-1 | 2-641615-2 | 2-641615-3 | 2-641615-4 |
| 40 50.67 | 1.995 50.67 | .694 17.63 | .600 15.24 | .620 15.75 | 2-641606-2 | 2-641606-4 | 2-641616-1 | 2-641616-2 | — | — |
| 42 53.21 | 2.095 53.21 | .694 17.63 | .600 15.24 | .620 15.75 | 2-382374-2 | — | — | — | — | — |
| 48 60.83 | 2.395 60.83 | .694 17.63 | .600 15.24 | .620 15.75 | — | — | — | 2-643576-2 | — | 2-643574-4 |

¹ ONLY sockets with straight solder tails are recommended for automatic insertion. All parts are packaged in plastic tubes. Sockets with retention feature are packaged in plastic tubes for handling and storage convenience only.

² Gold thickness in contact area; tin-lead plate on solder tails.

³ Closed frame design.

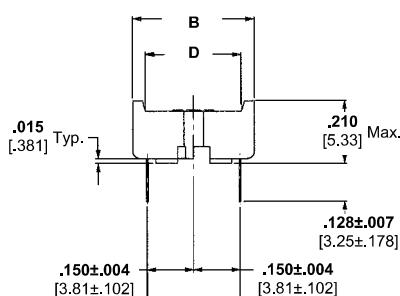
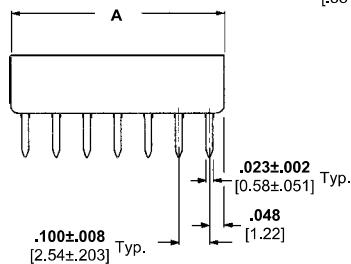
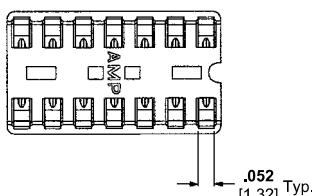
5
Sockets

Sockets accept .008—.014
[0.2—0.36] thick IC leads

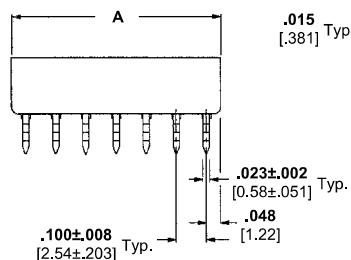
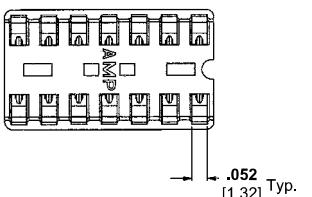
Material and Finish:

Housing — Glass-filled thermoplastic, 94V-0 rated, black

Contacts — Phosphor bronze or beryllium copper with tin or gold plating (see table)



Sockets with Straight Solder Tails

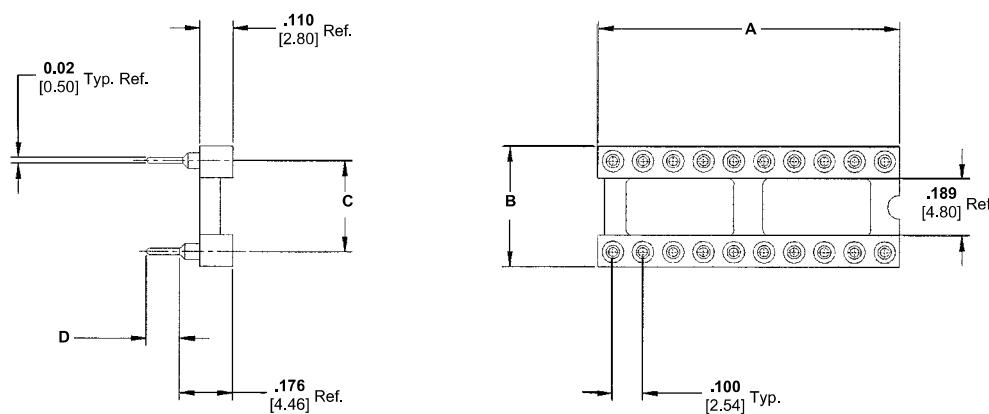


Sockets with Retention Feature Solder Tails

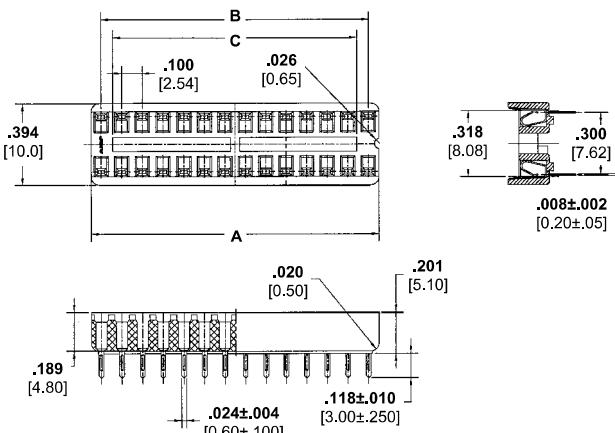
| No. of Positions | Dimensions | | | | Sockets with Straight Solder Tails ¹ | | Sockets with Retention Solder Tails ¹ | |
|------------------|----------------|---------------|---------------|---------------|---|--|--|--|
| | A | B | C | D | Beryllium Copper .000030 [0.00076] ² Gold Plate | Phosphor Bronze .000015 [0.00038] ² Gold Plate | Beryllium Copper Tinned | Phosphor Bronze Tinned .000015 [0.00038] ² Gold Plate |
| 14 | .695 17.65 | .394 10.01 | .300 7.62 | .320 8.13 | — | 2-640357-4 | 2-641261-1 | — |
| 16 | .795 20.19 | .394 10.01 | .300 7.62 | .320 8.13 | 2-640358-2 | 2-640358-4 | 2-641262-1 | 2-641262-4 |
| 18 | .895 22.73 | .394 10.01 | .300 7.62 | .320 8.13 | — | 2-640359-4 | — | — |
| 20 | .995 25.27 | .394 10.01 | .300 7.62 | .321 8.13 | 2-640464-2 | 2-640464-4 | 2-641264-1 | 2-641264-4 |
| 24 | 1.195 30.35 | .694 17.63 | .600 15.24 | .620 15.75 | 2-640361-2 | 2-640361-4 | 2-641266-1 | — |
| 28 | 1.395 35.43 | .694 17.63 | .600 15.24 | .620 15.75 | 2-640362-2 | 2-640362-4 | 2-641267-1 | 2-641267-4 |
| 40 | 1.995 50.67 | .694 17.63 | .600 15.24 | .620 15.75 | 2-640379-2 | 2-640379-4 | 2-641268-1 | 2-641268-4 |

¹ ONLY sockets with straight solder tails are recommended for automatic insertion. All parts are packaged in plastic tubes. Sockets with retention feature are packaged in plastic tubes for handling and storage convenience only.

² Gold thickness in contact area; tin-lead plate on solder tails.

Material and Finish:**Housing** — Glass-filled thermoplastic**Contacts** — Beryllium copper**Open Frame**

| No. of Positions | Type/ Centerline | Dimensions | | | | Part Numbers |
|------------------|----------------------|--------------|--------------|---------------|---------------|--------------|
| | | A | B | C | D | |
| 20 | .300 | .996 25.3 | .394 10.1 | .300 7.62 | .112 2.84 | 345721-4 |
| 20 | Wire Wrap Tail .300 | .996 25.3 | .394 10.1 | .300 7.62 | .051 12.95 | 3-345848-5 |
| 24 | Wire Wrap Tail .300 | 1.20 30.4 | .394 10.1 | .300 7.62 | .051 12.95 | 3-345850-5 |
| 28 | Auto Insertable .600 | 1.40 35.5 | .694 17.7 | .600 15.24 | .114 2.90 | 345870-4 |
| 32 | .600 | 1.60 40.6 | .694 17.7 | .600 15.24 | .112 2.84 | 345729-1 |

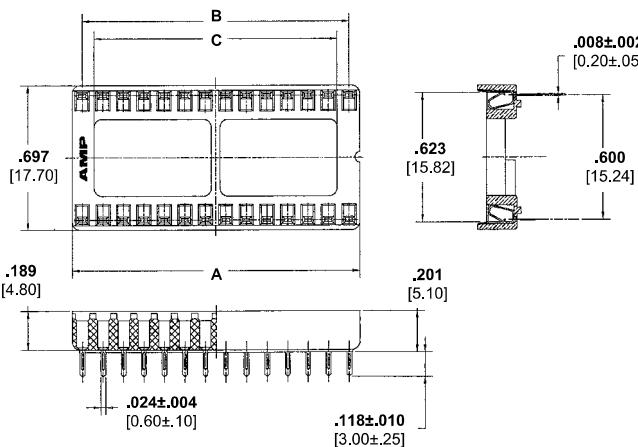
Economy Ladder Style, .300 Centerline**Material and Finish:****Housing** — Glass-filled thermoplastic, black**Contacts** — Phosphor bronze with tin plating

| No. of Positions | Dimensions | | | | Part Numbers |
|------------------|-------------|-------------|-------------|-----------------|--------------|
| | A | B | C | .300 Centerline | |
| 6 | 7.62 .300 | 5.08 .200 | 2.10 .083 | | 390261-1 |
| 8 | 10.16 .400 | 7.62 .300 | 4.76 .187 | | 390261-2 |
| 14 | 17.78 .700 | 15.24 .600 | 12.38 .487 | | 390261-3 |
| 16 | 20.32 .800 | 17.78 .700 | 14.92 .587 | | 390261-4 |
| 18 | 22.86 .900 | 20.32 .800 | 17.46 .687 | | 390261-5 |
| 20 | 25.40 1.400 | 22.86 .900 | 20.00 .787 | | 390261-6 |
| 22 | 27.94 1.100 | 25.40 1.000 | 22.54 .887 | | 390261-7 |
| 24 | 30.48 1.200 | 27.94 1.100 | 25.10 .988 | | 390261-8 |
| 28 | 35.56 1.400 | 33.02 1.300 | 30.12 1.185 | | 390261-9 |
| 32 | 40.64 1.600 | 38.10 1.500 | 35.20 1.386 | | 1-390261-0 |

Economy Ladder Style, .600 Centerline**Material and Finish:**

Housing — Glass-filled Thermoplastic, black

Contacts — Phosphor bronze with tin plating

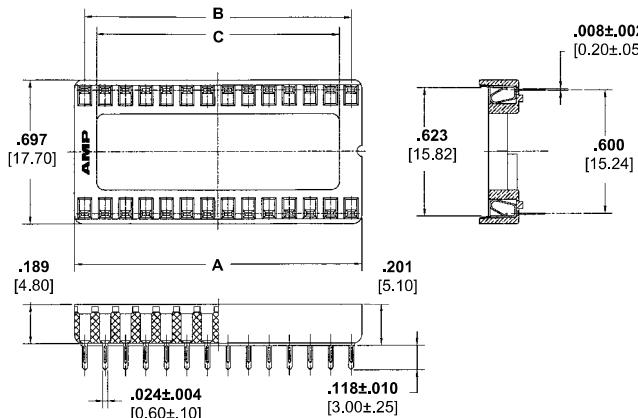


| No. of Positions | Dimensions | | | Part Numbers |
|------------------|-----------------------|-----------------------|-----------------------|-----------------|
| | A | B | C | .600 Centerline |
| 24 | 30.48 1.200 | 27.94 1.100 | 25.10 .988 | 390262-1 |
| 28 | 35.56 1.400 | 33.02 1.300 | 30.12 1.185 | 390262-2 |
| 32 | 40.64 1.600 | 38.10 1.500 | 35.20 1.386 | 390262-3 |
| 40 | 50.80 2.000 | 48.26 1.900 | 45.36 1.790 | 390262-5 |
| 42 | 53.34 2.100 | 50.08 1.970 | 47.90 1.890 | 390262-6 |
| 48 | 60.96 2.400 | 58.42 2.300 | 55.52 2.190 | 390262-7 |

Economy Over-the-Component (OTC) Style, 15.24 Centerline**Material and Finish:**

Housing — Glass-filled Thermoplastic, black

Contacts — Phosphor bronze with tin plating



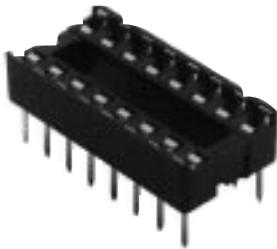
| No. of Positions | Dimensions | | | Part Numbers |
|------------------|-----------------------|-----------------------|-----------------------|------------------|
| | A | B | C | 15.24 Centerline |
| 24 | 25.10 .988 | 27.94 1.100 | 30.48 1.200 | 390263-7 |
| 28 | 30.12 1.190 | 33.02 1.300 | 35.56 1.400 | 390263-1 |
| 32 | 35.20 1.390 | 38.10 1.500 | 40.64 1.600 | 390263-2 |
| 40 | 45.36 1.790 | 48.26 1.900 | 50.80 2.000 | 390263-4 |
| 42 | 47.90 1.890 | 50.08 1.970 | 53.34 2.100 | 390263-5 |
| 48 | 55.52 2.190 | 58.42 2.300 | 60.96 2.400 | 390263-6 |

Sockets accept .008—.014 [0.2—0.36] thick IC leads

Material and Finish:

Housing — Glass-filled thermoplastic, 94V-0 rated, black

Contacts — Phosphor bronze or beryllium copper with gold plating (see table)

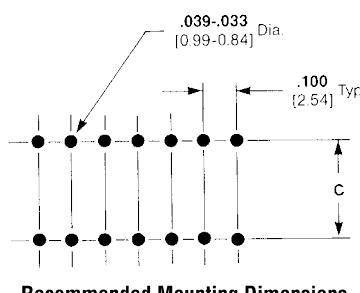
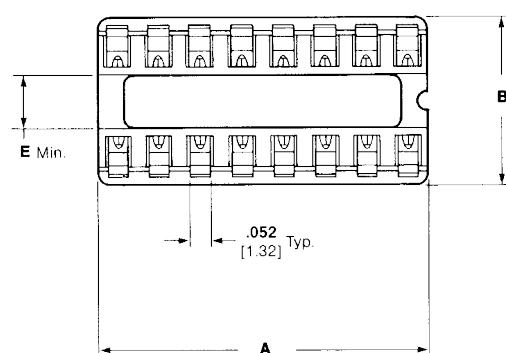


Recommended IC Leg Length:

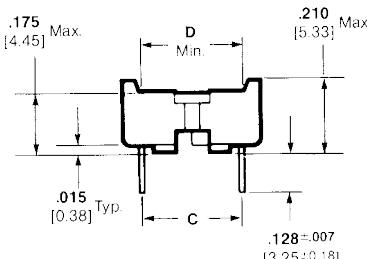
- 1) .100 [2.54] min. for a reliable contact surface.
- 2) .120 [3.05] max. to allow IC body to seat on socket.
- 3) Longer legs may be used, but IC cannot be fully seated on seating plane.

Note: All socket positions have "True Closed Bottom" design which allows no solder or flux wicking at class 1 conditions of EIA 486.

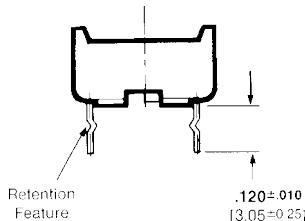
Dual Leaf (DL), Over-the-Component (OTC) Style



Recommended Mounting Dimensions



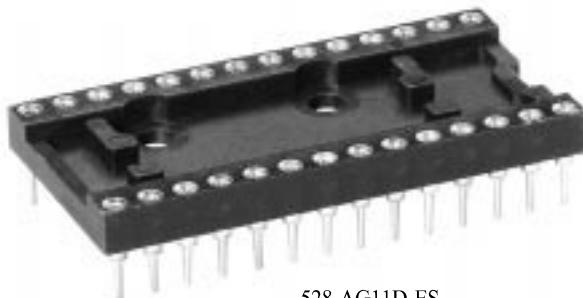
Sockets with Straight Solder Tails



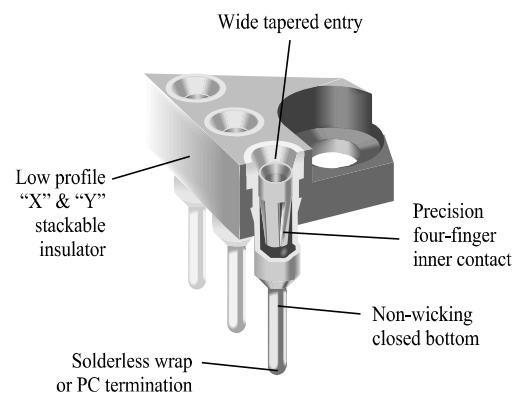
Sockets with Retention Feature Solder Tails

| No. of Positions | Dimensions | | | | | Sockets with Straight Solder Tails | | Sockets with Retention Feature Solder Tails | |
|------------------|----------------|---------------|---------------|---------------|--------------|------------------------------------|-----------------|---|--|
| | A | B | C | D | E | Beryllium Copper | Phosphor Bronze | Beryllium Copper | |
| 32 | .1595 40.51 | .694 17.63 | .600 15.24 | .620 15.75 | .380 9.65 | 2-644018-2 | 2-644018-4 | 2-382189-2 | |

¹ Gold thickness in contact area with tin-lead plate on solder tails. All parts packaged in plastic tubes.

Four-Fingered Contact & Solid Insulator**500 Series**

528-AG11D-ES

**FEATURES:**

The 500 Series Socket features a precision four-finger inner contact to produce the industry standard for high reliability screw machine sockets.

- Precision four-finger inner contact provides concentric funnel entry for easy flat and round lead insertion
- Machined (Premium Series) and stamped (Economy Series) contacts are available
- "X" & "Y" stackable
- Non-wicking, closed bottom sleeve gives 100% protection against flux and solder contamination. Choice of solderless wrap or PC termination
- Accommodates 6 through 40 pin DIPS, rectangular or round leads
-  Recognized under the Component Program of Underwriters Laboratories, Inc. file no. E111362
- Beryllium copper inner contact for maximum mechanical and electrical performance
- For extreme conditions involving shock and vibration, The AMP high retention series is available

APPLICATION DIMENSIONS:

- PCB Thickness Range: Standard .062" and .092" (1.57 and 2.34)
- PCB Hole Size Range: .035" \pm .002" (0.89 \pm 0.05) PC tail, .055" \pm .003" (1.40 \pm 0.08) solderless wrap
- IC Pin Dimension Range: .009" x .015" (0.23 x 0.38) through .011" x .020" (0.28 x 0.51), .016" to .021" (0.41 to 0.53) round lead, .105" (2.67) min. length

MATERIAL SPECIFICATIONS:

- | | |
|-----------------|---|
| Insulator | Thermoplastic polyester, UL rated 94V-0 |
| Sleeve | Machined brass/formed copper |
| Contact | Beryllium copper |
| Sleeve Plating | Tin/lead or gold |
| Contact Plating | Premium or Economy Series (ES) - gold or tin/lead |
| | Economy Series (ESL) - low gold |

PERFORMANCE SPECIFICATIONS:**MECHANICAL**

- | | |
|-------------------------------|---|
| Vibration |Passed MIL-STD-1344, Method 2005.1, Condition II, 10 G's |
| Shock |Passed MIL-STD-1344, Method 2004.1, Condition C, 100 G's |
| Durability |Passed MIL-STD-1344, Method 2016 |
| Normal Force |125 Grams (4.4 oz.) average with .018" (0.46) dia. polished steel pin (Premium Series) |
| |200 Grams (7.1 oz.) average with .018" (0.46) dia. polished steel pin (Economy Series) |
| Inner Contact Retention |7.5 Lbs. per line average |
| in Sleeve |7.5 Lbs. per line average |
| Sleeve Retention |3.0 Lbs. per line minimum |
| Solderability |Passed MIL-STD-202F, Method 208 |
| Insertion Force |Premium - 134 Grams (4.7 oz.) average with a .018" (0.46) dia. polished steel pin |
| |Economy - 179 Grams (6.3 oz.) average with a .018" (0.46) dia. polished steel pin |
| Withdrawal Force |63 Grams (2.2 oz.) average with a .018" (0.46) dia. polished steel pin |

ELECTRICAL

- | | |
|---------------------------------|---|
| Contact Resistance |10 Milliohms max. |
| Contact Rating |3 Amps |
| Capacitance |1.0 pF per MIL-STD-202, Method 305 (contact to contact) |
| Insulation Resistance |5,000 Megohms min. @ 500 VDC per MIL-STD-1344, Method 3003.1 |
| Dielectric Withstanding Voltage |1,000 Volts RMS per MIL-STD-1344, Method 3001.1 |

ENVIRONMENTAL

- | | |
|-----------------------|---|
| Humidity |Passed MIL-STD-1344, Method 1002.2, Cond. II |
| Thermal Shock |Passed MIL-STD-1344, Method 1003.1, Cond. A |
| Operation Temperature |Gold inner contact -55°C to +125°C, Tin/lead inner contact -55°C to +105°C |

Four-Fingered Contact & Solid Insulator

500 Series

STANDARD CONFIGURATIONS

| Number of Contacts | A | B* | C | Number of Contacts | A | B* | C |
|--------------------|------------------|-----------------|-----------------|--------------------|------------------|-----------------|-----------------|
| 6 | .300 (7,62) | | | 24 | 1.200 (30,48) | .400 (10,16) | .500 (12,70) |
| 8 | .400 (10,16) | | | 24 | 1.200 (30,48) | | |
| 14 | .700 (17,78) | | | 28 | 1.400 (35,56) | | |
| 16 | .800 (20,32) | | | 32 | 1.600 (40,64) | .600 (15,24) | .700 (45,72) |
| 18 | .900 (22,86) | | | 36 | 1.800 (47,72) | | |
| 20 | 1.000 (25,40) | | | 40 | 2.000 (50,80) | | |
| 22 | 1.150 (29,21) | .400 (10,16) | .500 (12,70) | | | | |

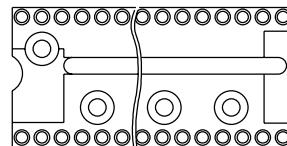
* Dimension B $\pm .005$
(0,13)

Figure 2

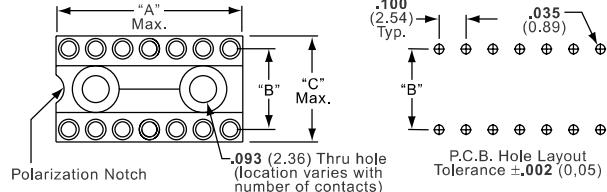
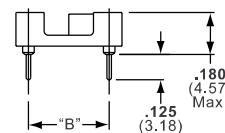
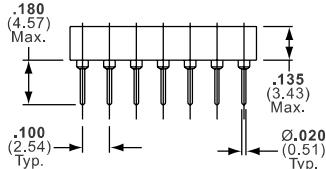


Figure 1



PART NUMBERS

| Economy Series | Premium | Figure | Position | Centerline | Contact | Sleeve | Economy Series | Premium | Figure | Position | Centerline | Contact | Sleeve |
|----------------|-----------|--------|----------|-----------------|----------|----------|---|---------------|--------|-----------------|------------|----------|----------|
| 506-AG10D-ES | 506-AG10D | 6 | | | Gold | Gold | 524-AG65D-ES | 524-AG65D | 24 | | | Gold | Gold |
| 506-AG10D-ESL | | 6 | | | Low Gold | Tin/Lead | 524-AG65D-ESL | 524-AG66D | 24 | .400 (10,16) | | Low Gold | Tin/Lead |
| 506-AG11D-ES | 506-AG11D | 1 | 6 | .300 (7,62) | Gold | Tin/Lead | 524-AG66D-ES | 524-AG66D-ESL | 24 | | | Gold | Tin/Lead |
| 506-AG11D-ESL | | 6 | | | Low Gold | Tin/Lead | 524-AG13D-ES | 524-AG13D | 24 | | | Low Gold | Tin/Lead |
| 506-AG12D-ES | 506-AG12D | 6 | | | Tin/Lead | Tin/Lead | 524-AG10D-ES | 524-AG10D | 24 | | | Gold | Tin/Lead |
| 508-AG10D-ES | 508-AG10D | 8 | | | Gold | Gold | 524-AG10D-ESL | 524-AG10D | 24 | | | Gold | Tin/Lead |
| 508-AG10D-ESL | | 8 | | | Low Gold | Gold | 524-AG11D-ES | 524-AG11D | 24 | .600 (15,24) | | Low Gold | Tin/Lead |
| 508-AG11D-ES | 508-AG11D | 1 | 8 | .300 (7,62) | Gold | Tin/Lead | 524-AG11D-ESL | 524-AG12D | 24 | | | Gold | Tin/Lead |
| 508-AG11D-ESL | | 8 | | | Low Gold | Tin/Lead | 524-AG12D-ES | 524-AG12D | 24 | | | Low Gold | Tin/Lead |
| 508-AG12D-ES | 508-AG12D | 8 | | | Tin/Lead | Tin/Lead | 528-AG10D-ES | 528-AG10D | 28 | | | Gold | Tin/Lead |
| 514-AG10D-ES | 514-AG10D | 14 | | | Gold | Gold | 528-AG10D-ESL | 528-AG10D | 28 | .600 (15,24) | | Low Gold | Tin/Lead |
| 514-AG10D-ESL | | 14 | | | Low Gold | Tin/Lead | 528-AG11D-ES | 528-AG11D | 28 | | | Gold | Tin/Lead |
| 514-AG11D-ES | 514-AG11D | 1 | 14 | .300 (7,62) | Gold | Tin/Lead | 528-AG11D-ESL | 528-AG12D | 28 | | | Low Gold | Tin/Lead |
| 514-AG11D-ESL | | 14 | | | Low Gold | Tin/Lead | 528-AG12D-ES | 528-AG12D | 28 | | | Gold | Tin/Lead |
| 514-AG12D-ES | 514-AG12D | 14 | | | Tin/Lead | Tin/Lead | 532-AG10D-ES | 532-AG10D | 32 | | | Gold | Tin/Lead |
| 516-AG10D-ES | 516-AG10D | 16 | | | Gold | Gold | 532-AG10D-ESL | 532-AG10D | 32 | .600 (15,24) | | Low Gold | Tin/Lead |
| 516-AG10D-ESL | | 16 | | | Low Gold | Gold | 532-AG11D-ES | 532-AG11D | 32 | | | Gold | Tin/Lead |
| 516-AG11D-ES | 516-AG11D | 1 | 16 | .300 (7,62) | Gold | Tin/Lead | 532-AG11D-ESL | 532-AG11D | 32 | | | Low Gold | Tin/Lead |
| 516-AG11D-ESL | | 16 | | | Low Gold | Tin/Lead | 532-AG12D-ES | 532-AG12D | 32 | | | Gold | Tin/Lead |
| 516-AG12D-ES | 516-AG12D | 16 | | | Tin/Lead | Tin/Lead | 536-AG10D-ES | 536-AG10D | 36 | | | Gold | Tin/Lead |
| 518-AG10D-ES | 518-AG10D | 18 | | | Gold | Gold | 536-AG10D-ESL | 536-AG10D | 36 | .600 (15,24) | | Low Gold | Tin/Lead |
| 518-AG10D-ESL | | 18 | | | Low Gold | Gold | 536-AG11D-ES | 536-AG11D | 36 | | | Gold | Tin/Lead |
| 518-AG11D-ES | 518-AG11D | 1 | 18 | .300 (7,62) | Gold | Tin/Lead | 536-AG11D-ESL | 536-AG11D | 36 | | | Low Gold | Tin/Lead |
| 518-AG11D-ESL | | 18 | | | Low Gold | Tin/Lead | 536-AG12D-ES | 536-AG12D | 36 | | | Gold | Tin/Lead |
| 518-AG12D-ES | 518-AG12D | 18 | | | Tin/Lead | Tin/Lead | 536-AG10D-ES | 536-AG10D | 36 | | | Low Gold | Tin/Lead |
| 520-AG10D-ES | 520-AG10D | 20 | | | Gold | Gold | 540-AG10D-ES | 540-AG10D | 40 | | | Gold | Tin/Lead |
| 520-AG10D-ESL | | 20 | | | Low Gold | Gold | 540-AG10D-ESL | 540-AG10D | 40 | | | Low Gold | Tin/Lead |
| 520-AG11D-ES | 520-AG11D | 1 | 20 | .300 (7,62) | Gold | Tin/Lead | 540-AG11D-ES | 540-AG11D | 40 | .600 (15,24) | | Gold | Tin/Lead |
| 520-AG11D-ESL | | 20 | | | Low Gold | Tin/Lead | 540-AG11D-ESL | 540-AG11D | 40 | | | Low Gold | Tin/Lead |
| 520-AG12D-ES | 520-AG12D | 20 | | | Tin/Lead | Tin/Lead | 540-AG12D-ES | 540-AG12D | 40 | | | Gold | Tin/Lead |
| 522-AG10D-ES | 522-AG10D | 22 | | | Gold | Gold | Note: Part numbers in this chart and in detail shown refer to a .125" PC Tail Pin | | | | | | |
| 522-AG10D-ESL | | 22 | | | Low Gold | Gold | .125" PC Tail Pin | | | | | | |
| 522-AG11D-ES | 522-AG11D | 1 | 22 | .400 (10,16) | Gold | Tin/Lead | .125" PC Tail Pin | | | | | | |
| 522-AG11D-ESL | | 22 | | | Low Gold | Tin/Lead | .125" PC Tail Pin | | | | | | |
| 522-AG12D-ES | 522-AG12D | 22 | | | Tin/Lead | Tin/Lead | .125" PC Tail Pin | | | | | | |

ECONOMY AND PREMIUM SERIES - .180" PC TAIL PINS

5XX-AG44D-XXX - Gold contact, tin/lead sleeve

5XX-AG45D-XXX - Gold contact, gold sleeve

5XX-AG143D-XXX - Tin/lead contact, tin/lead sleeve

For wire wrap sockets or 24 position on .400" (10,16) in high retention or .180 (4,57) tails, please consult Tyco Electronics.

HIGH RETENTION SERIES

5XX-AG34D - Gold contact, tin/lead sleeve

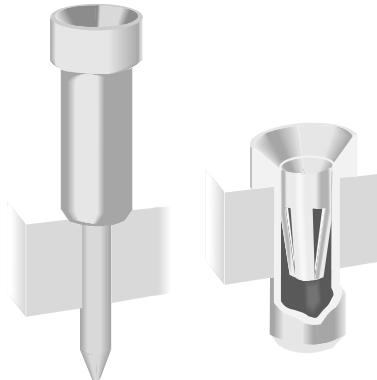
5XX-AG33D - Gold contact, gold sleeve

5XX-AG38D - Tin/lead contact, tin/lead sleeve

Note: Before ordering, see Cross Reference in Section 15 for equivalent Tyco Electronics Part Number.

Four-Fingered Contacts Disposable Carriers**700 Series**

732-AG4D-ES

**FEATURES:**

A disposable aluminum carrier forms the backbone of the 700 Series socket, an innovative extension of the AMP precision four-fingered, inner contact concept. Conceived for IC applications requiring maximum air flow for cooling, the 700 Series eliminates heat entrapment associated with an insulator. Additional benefits are:

- Easy solder joint inspection-easy cleaning-easy repair
- "X" & "Y" stackability for circuit flexibility and optimum use of PCB real estate
- Gang insertion of socket pins into PC boards
- 100% non-wicking of flux and solder
- Standard or low profile PC board mounting
- Availability in 6 to 40 positions on .100"(2,54) centers and a wide variety of row spacing
- Machined (Premium Series) and stamped (Economy Series) contacts are available

APPLICATION DIMENSIONS:

- PCB Thickness Range: Standard .062" and .092" (1,57 and 2,34)
- IC Pin Dimension Range:.016" to .021" (0,41 to 0,53) dia., .105" (2,67) min. length
- PCB Hole Size Range: $.035" \pm .003"$ ($0,89 \pm 0,08$) standard mount, $.055 \pm .001"$ ($1,40 \pm 0,03$) low profile mount

MATERIAL SPECIFICATIONS:

- CarrierAluminum
- SleeveMachined brass
- ContactBeryllium copper
- Sleeve PlatingTin/lead or gold
- Contact PlatingPremium or Economy Series (ES) - gold or tin/lead
Economy Series (ESL) - low gold

PERFORMANCE SPECIFICATIONS:**MECHANICAL**

- VibrationPassed MIL-STD-1344, Method 2005.1, Condition II, 10 G's
- Shock.....Passed MIL-STD-1344, Method 2004.1, Condition C, 100 G's
- DurabilityPassed MIL-STD-1344, Method 2016
- Normal Force125 Grams average with .018" (0,46) dia. polished steel pin (Premium Series)
200 Grams average with .018" (0,46) dia. polished steel pin (Economy Series)
- Inner Contact Retention
in Sleeve7.5 Lbs. per line average
- Sleeve Retention
in Plastic3.0 Lbs. per line minimum
- SolderabilityPassed MIL-STD-202F, Method 208
- Insertion ForcePremium - 134 Grams (4.7 oz.) average with a .018" (0,46) dia. polished steel pin
Economy - 179 Grams (6.3 oz.) average with a .018" (0,46) dia. polished steel pin
- Withdrawal Force63 Grams (2.2 oz.) average with a (Premium and Economy) .018" (0,46) dia. polished steel pin

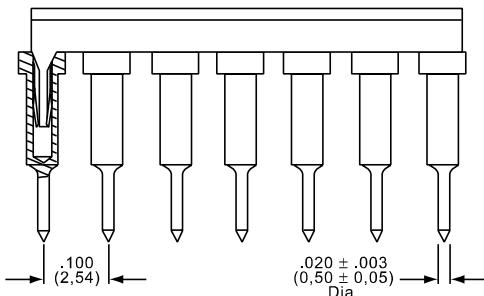
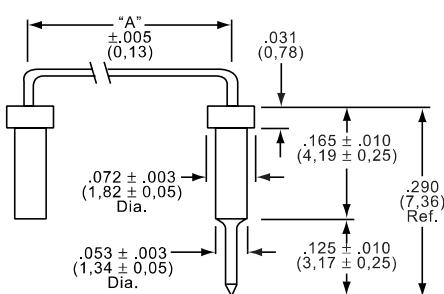
ELECTRICAL

- Contact Resistance10 Milliohms max.
- Contact Rating.....3 Amps
- Capacitance1.0 pF per MIL-STD-202, Method 305 (contact to contact)
- Insulation Resistance.....5,000 Megohms min. @ 500 VDC per MIL-STD-1344, Method 3003.1
- Dielectric Withstanding
Voltage1,000 Volts RMS per MIL-STD-1344, Method 3001.1

ENVIRONMENTAL

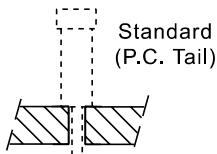
- HumidityPassed MIL-STD-1344, Method 1002.2, Cond. II
- Thermal ShockPassed MIL-STD-1344, Method 1003.1, Cond. A
- Operation TemperatureGold inner contact -55°C to +125°C,
Tin/lead inner contact -55°C to +105°C

700 Series

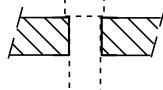


REPLACEMENT SOCKET TERMINALS

| | Standard Mount | Low Profile Mount |
|-----------------|----------------|-------------------|
| Gold Sleeve | LSG-1AG14-1 | LSG-1DG17-1 |
| Tin/Lead Sleeve | LSG-1AG14-14 | LSG-1DG17-14 |



MOUNTING OPTIONS

Low Profile
(No Tail)

STANDARD MOUNT PART NUMBERS

| Economy Series Part Number | Premium Series Part Number | Number of Contacts | Contact Plating | Sleeve Plating | A | Economy Series Part Number | Premium Series Part Number | Number of Contacts | Contact Plating | Sleeve Plating | A |
|-------------------------------|----------------------------|--------------------|--------------------------|------------------------------|-----------------|-------------------------------|----------------------------|--------------------|--------------------------|------------------------------|-----------------|
| 706-AG2D-ES 706-AG2D-ESL | 706-AG1D 706-AG2D | 6 6 6 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | | 724-AG2D-ES 724-AG2D-ESL | 724-AG1D 724-AG2D | 24 24 24 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | .300 (7.62) |
| 708-AG2D-ES 708-AG2D-ESL | 708-AG1D 708-AG2D | 8 8 8 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | | 724-AG22D-ES 724-AG22D-ESL | 724-AG21D 724-AG22D | 24 24 24 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | .400 (10.16) |
| 714-AG2D-ES 714-AG2D-ESL | 714-AG1D 714-AG2D | 14 14 14 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | | 724-AG4D-ES 724-AG4D-ESL | 724-AG3D 724-AG4D | 24 24 24 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | |
| 716-AG2D-ES 716-AG2D-ESL | 716-AG1D 716-AG2D | 16 16 16 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | | 728-AG4D-ES 728-AG4D-ESL | 728-AG3D 728-AG4D | 28 28 28 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | |
| 718-AG2D-ES 718-AG2D-ESL | 718-AG1D 718-AG2D | 18 18 18 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | | 732-AG4D-ES 732-AG4D-ESL | 732-AG3D 732-AG4D | 32 32 32 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | |
| 720-AG2D-ES 720-AG2D-ESL | 720-AG1D 720-AG2D | 20 20 20 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | | 736-AG4D-ES 736-AG4D-ESL | 736-AG3D 736-AG4D | 36 36 36 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | |
| 722-AG2D-ES 722-AG2D-ESL | 722-AG1D 722-AG2D | 22 22 22 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | .400 (10.16) | 740-AG4D-ES 740-AG4D-ESL | 740-AG3D 740-AG4D | 40 40 40 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | |
| 722-AG22D-ES 722-AG22D-ESL | 722-AG21D 722-AG22D | 22 22 22 | Gold Gold Low Gold | Gold Tin/Lead Tin/Lead | .300 (7.62) | | | | | | |

5

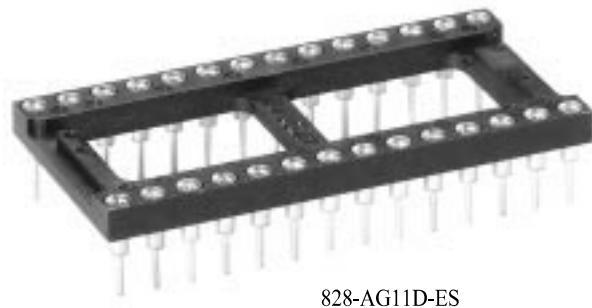
Sockets

LOW PROFILE PART NUMBERS

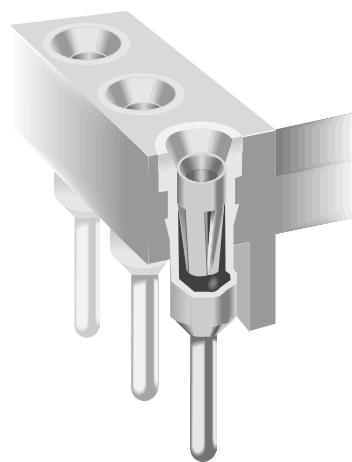
| Low Profile Part Number | Number of Contacts | Outer Sleeve Plating | A | Low Profile Part Number | Number of Contacts | Outer Sleeve Plating | A |
|--------------------------|--------------------|----------------------|-----------------|--------------------------|--------------------|----------------------|-----------------|
| 706-AG10D 706-AG20D | 6 6 | Gold Tin/Lead | | 724-AG10D 724-AG20D | 24 24 | Gold Tin/Lead | .300 (7.62) |
| 708-AG10D 708-AG20D | 8 8 | Gold Tin/Lead | | 724-AG410D 724-AG420D | 24 24 | Gold Tin/Lead | .400 (10.16) |
| 714-AG10D 714-AG20D | 14 14 | Gold Tin/Lead | | 724-AG30D 724-AG40D | 24 24 | Gold Tin/Lead | |
| 716-AG10D 716-AG20D | 16 16 | Gold Tin/Lead | | 728-AG30D 728-AG40D | 28 28 | Gold Tin/Lead | |
| 718-AG10D 718-AG20D | 18 18 | Gold Tin/Lead | | 732-AG30D 732-AG40D | 32 32 | Gold Tin/Lead | |
| 720-AG10D 720-AG20D | 20 20 | Gold Tin/Lead | | 736-AG30D 736-AG40D | 36 36 | Gold Tin/Lead | |
| 722-AG10D 722-AG20D | 22 22 | Gold Tin/Lead | .400 (10.16) | 740-AG30D 740-AG40D | 40 40 | Gold Tin/Lead | |
| 722-AG310D 722-AG320D | 22 22 | Gold Tin/Lead | .300 (7.62) | | | | |

Note: Before ordering, see Cross Reference in Section 15 for equivalent Tyco Electronics Part Number.

5011

Four-Fingered Contact Open Insulator**800 Series**

828-AG11D-ES

**FEATURES:**

The 800 Series combines precision four-fingered inner contacts with an open ladder insulator to produce the ultimate high-reliability socket.

- Precision four-fingered inner contacts provide concentric funnel entry for easy flat and round lead insertion
- "X" & "Y" stackable. Open ladder for cooling, cleaning and inspection. Low profile
- Accommodates 8 through 64 pins DIPS, rectangular or round IC leads
- Non-wicking, closed bottom sleeve provides 100% protection against flux and solder contamination. Choice of solderless wrap or PC termination
- Recognized under the Component Program of Underwriter Laboratories, Inc. File No. E111362
- Beryllium copper inner contact for maximum mechanical and electrical performance
- Machined (Premium Series) and stamped (Economy Series) contacts are available
- For extreme conditions involving shock and vibration, The AMP high retention force contact is available

APPLICATION DIMENSIONS:

- PCB Thickness Range: Standard .062" and .092" (1,57 and 2,34)
- PCB Hole Size Range: $.035" \pm .002"$ (0.89 ± 0.05) PC tail, $.055" \pm .003"$ (1.40 ± 0.08) solderless wrap
- IC Pin Dimension Range: $.009" \times .015"$ (0.23×0.38) through $.011" \times .020"$ (0.28×0.51)
 $.016" \text{ to } .021"$ ($0.41 \text{ to } 0.53$) round lead
.105" (2,67) min. length

MATERIAL SPECIFICATIONS:

- | | |
|-----------------|--|
| Insulator | Thermoplastic polyester, UL rated 94V-0 |
| Sleeve | Machined brass |
| Contact | Beryllium copper |
| Sleeve Plating | Tin/lead or gold |
| Contact Plating | Premium or Economy Series (ES) - gold or tin/lead Economy Series (ESL) - low gold |

PERFORMANCE SPECIFICATIONS:**MECHANICAL**

| | |
|-----------------------------|--|
| Vibration | Passed MIL-STD-1344, Method 2005.1, Condition II, 10 G's |
| Shock | Passed MIL-STD-1344, Method 2004.1, Condition C, 100 G's |
| Durability | Passed MIL-STD-1344, Method 2016 |
| Normal Force | 125 Grams (4.4 oz.) average with .018" (0.46) dia. polished steel pin (Premium Series) 200 Grams (7.1 oz.) average with .018" (0.46) dia. polished steel pin (Economy Series) |
| Inner Contact Retention | 7.5 Lbs. per line average |
| Sleeve Retention in Plastic | 3.0 Lbs. per line minimum |
| Solderability | Passed MIL-STD-202F, Method 208 |
| Insertion Force | Premium - 134 grams (4.7 oz.) average with a .018" (0.46) dia. polished steel pin Economy - 179 grams (6.3 oz.) average with a .018" (0.46) dia. polished steel pin |
| Withdrawal Force | 63 Grams (2.2 oz.) average with a (.Premium and Economy) .018" (0.46) dia. polished steel pin |

ELECTRICAL

| | |
|---------------------------------|--|
| Contact Resistance | 10 Milliohms max. |
| Contact Rating | 3 Amps |
| Capacitance | 1 pF per MIL-STD-202, Method 305 (contact to contact) |
| Insulation Resistance | 5,000 Megohms min. @ 500 VDC per MIL-STD-1344, Method 3003.1 |
| Dielectric Withstanding Voltage | 1,000 Volts RMS per MIL-STD-1344, Method 3001.1 |

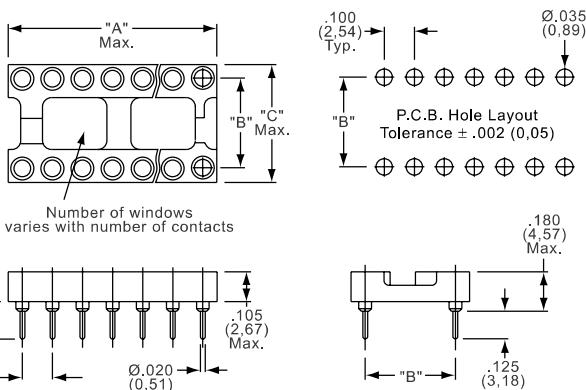
ENVIRONMENTAL

| | |
|-----------------------|---|
| Humidity | Passed MIL-STD-1344, Method 1002.2, Cond. II |
| Thermal Shock | Passed MIL-STD-1344, Method 1003.1, Cond. A |
| Operation Temperature | Gold inner contact -55°C to +125°C, Tin/lead inner contact -55°C to +105°C |

800 Series

STANDARD CONFIGURATIONS

| Number of Contacts | A | B* | C | Number of Contacts | A | B* | C |
|--------------------|------------------|-----------------|-----------------|--------------------|------------------|-----------------|------------------|
| 8 | .400 (10,16) | | | 24 | 1.200 (30,48) | | |
| 14 | .700 (17,78) | | | 28 | 1.400 (35,56) | | |
| 16 | .800 (20,32) | .300 (7,62) | .400 (10,16) | 32 | 1.600 (40,64) | | |
| 18 | .900 (22,86) | | | 36 | 1.800 (45,72) | .600 (15,24) | .700 (17,78) |
| 20 | 1.000 (25,40) | | | 40 | 2.000 (50,80) | | |
| 22 | 1.100 (27,94) | .400 (10,16) | .500 (12,70) | 42 | 2.100 (53,34) | | |
| 24 | 1.200 (30,48) | .300 (7,62) | .400 (10,16) | 48 | 2.400 (60,96) | | |
| 24 | | | | 64 | 3.200 (81,28) | .900 (22,86) | 1.000 (25,40) |

* Dimension B ± .005
(0,13)

Note: Before ordering, see Cross Reference in Section 15 for equivalent Tyco Electronics Part Number.

PART NUMBERS

| Economy Series | Premium Series | Position | Centerline | Contact | Sleeve | Economy Series | Premium Series | Position | Centerline | Contact | Sleeve |
|----------------|----------------|----------|----------------|----------|----------|----------------|----------------|----------|-----------------|----------|----------|
| 348465 | 348465 | 6 | .300 (7,62) | Gold | Tin/Lead | 348479 | 348479 | 24 | | Gold | Tin/Lead |
| 348466 | 348466 | 8 | | Gold | Tin/Lead | 824-AG10D-ES | 824-AG10D | 24 | | Gold | Gold |
| 808-AG10D-ESL | 808-AG10D | 8 | | Gold | Gold | 824-AG10D-ESL | 824-AG10D | 24 | | Low Gold | Gold |
| 808-AG10D-ESL | | | .300 | Low Gold | Gold | 824-AG11D-ES | 824-AG11D | 24 | | Gold | Tin/Lead |
| 808-AG11D-ES | 808-AG11D | 8 | (7,62) | Gold | Tin/Lead | 824-AG11D-ESL | 824-AG11D | 24 | | Low Gold | Tin/Lead |
| 808-AG11D-ESL | | | | Low Gold | Tin/Lead | 824-AG12D-ES | 824-AG12D | 24 | | Tin/Lead | Tin/Lead |
| 808-AG12D-ES | 808-AG12D | 8 | | Tin/Lead | Tin/Lead | 348474 | 348474 | 28 | .300 (7,62) | Gold | Tin/Lead |
| 348467 | 348467 | 10 | .300 (7,62) | Gold | Tin/Lead | 348477 | 348477 | 28 | .400 (10,16) | Gold | Tin/Lead |
| 348468 | 348468 | 14 | | Gold | Tin/Lead | 348480 | 348480 | 28 | | Gold | Tin/Lead |
| 814-AG10D-ES | 814-AG10D | 14 | | Gold | Gold | 828-AG10D-ES | 828-AG10D | 28 | | Gold | Gold |
| 814-AG10D-ESL | | 14 | .300 | Low Gold | Gold | 828-AG10D-ESL | 828-AG10D | 28 | .600 | Low Gold | Gold |
| 814-AG11D-ES | 814-AG11D | 14 | (7,62) | Gold | Tin/Lead | 828-AG11D-ES | 828-AG11D | 28 | (15,24) | Gold | Tin/Lead |
| 814-AG11D-ESL | | 14 | | Low Gold | Tin/Lead | 828-AG11D-ESL | 828-AG11D | 28 | | Low Gold | Tin/Lead |
| 814-AG12D-ES | 814-AG12D | 14 | | Tin/Lead | Tin/Lead | 828-AG12D-ES | 828-AG12D | 28 | | Tin/Lead | Tin/Lead |
| 348469 | 348469 | 16 | | Gold | Tin/Lead | 348478 | 348478 | 32 | .400 (10,16) | Gold | Tin/Lead |
| 816-AG10D-ES | 816-AG10D | 16 | | Gold | Gold | 348481 | 348481 | 32 | | Gold | Tin/Lead |
| 816-AG10D-ESL | | 16 | .300 | Low Gold | Gold | 832-AG10D-ES | 832-AG10D | 32 | | Gold | Gold |
| 816-AG11D-ES | 816-AG11D | 16 | (7,62) | Gold | Tin/Lead | 832-AG11D-ES | 832-AG11D | 32 | .600 | Low Gold | Gold |
| 816-AG11D-ESL | | 16 | | Low Gold | Tin/Lead | 832-AG11D-ESL | 832-AG11D | 32 | (15,24) | Gold | Tin/Lead |
| 816-AG12D-ES | 816-AG12D | 16 | | Tin/Lead | Tin/Lead | 832-AG12D-ES | 832-AG12D | 32 | | Low Gold | Tin/Lead |
| 348470 | 348470 | 18 | | Gold | Tin/Lead | 348482 | 348482 | 36 | | Gold | Tin/Lead |
| 818-AG10D-ES | 818-AG10D | 18 | | Gold | Gold | 836-AG10D-ES | 836-AG10D | 36 | | Gold | Gold |
| 818-AG10D-ESL | | 18 | .300 | Low Gold | Gold | 836-AG10D-ESL | 836-AG10D | 36 | .600 | Low Gold | Gold |
| 818-AG11D-ES | 818-AG11D | 18 | (7,62) | Gold | Tin/Lead | 836-AG11D-ES | 836-AG11D | 36 | (15,24) | Gold | Tin/Lead |
| 818-AG11D-ESL | | 18 | | Low Gold | Tin/Lead | 836-AG11D-ESL | 836-AG11D | 36 | | Low Gold | Tin/Lead |
| 818-AG12D-ES | 818-AG12D | 18 | | Tin/Lead | Tin/Lead | 836-AG12D-ES | 836-AG12D | 36 | | Tin/Lead | Tin/Lead |
| 348471 | 348471 | 20 | | Gold | Tin/Lead | 348483 | 348483 | 40 | | Gold | Tin/Lead |
| 820-AG10D-ES | 820-AG10D | 20 | | Gold | Gold | 840-AG10D-ES | 840-AG10D | 40 | | Gold | Gold |
| 820-AG10D-ESL | | 20 | .300 | Low Gold | Gold | 840-AG10D-ESL | 840-AG10D | 40 | .600 | Low Gold | Gold |
| 820-AG11D-ES | 820-AG11D | 20 | (7,62) | Gold | Tin/Lead | 840-AG11D-ES | 840-AG11D | 40 | (15,24) | Gold | Tin/Lead |
| 820-AG11D-ESL | | 20 | | Low Gold | Tin/Lead | 840-AG11D-ESL | 840-AG11D | 40 | | Low Gold | Tin/Lead |
| 820-AG12D-ES | 820-AG12D | 20 | | Tin/Lead | Tin/Lead | 840-AG12D-ES | 840-AG12D | 40 | | Tin/Lead | Tin/Lead |
| 348472 | 348472 | 22 | .300 (7,62) | Gold | Tin/Lead | 348484 | 348484 | 42 | | Gold | Tin/Lead |
| 348475 | 348475 | 22 | | Gold | Tin/Lead | 842-AG10D-ES | 842-AG10D | 42 | | Gold | Gold |
| 822-AG10D-ES | 822-AG10D | 22 | | Gold | Gold | 842-AG10D-ESL | 842-AG10D | 42 | .600 | Low Gold | Gold |
| 822-AG10D-ESL | | 22 | .400 | Low Gold | Gold | 842-AG11D-ES | 842-AG11D | 42 | (15,24) | Gold | Tin/Lead |
| 822-AG11D-ES | 822-AG11D | 22 | (10,16) | Gold | Tin/Lead | 842-AG11D-ESL | 842-AG11D | 42 | | Low Gold | Tin/Lead |
| 822-AG11D-ESL | | 22 | | Low Gold | Tin/Lead | 842-AG12D-ES | 842-AG12D | 42 | | Tin/Lead | Tin/Lead |
| 822-AG12D-ES | 822-AG12D | 22 | | Tin/Lead | Tin/Lead | 348485 | 348485 | 48 | | Gold | Tin/Lead |
| 348473 | 348473 | 24 | | Gold | Tin/Lead | 848-AG10D-ES | 848-AG10D | 48 | | Gold | Gold |
| 824-AG30D-ES | 824-AG30D | 24 | | Gold | Gold | 848-AG10D-ESL | 848-AG10D | 48 | | Low Gold | Gold |
| 824-AG30D-ESL | | 24 | .300 | Low Gold | Gold | 848-AG11D-ES | 848-AG11D | 48 | | Gold | Tin/Lead |
| 824-AG31D-ES | 824-AG31D | 24 | (7,62) | Gold | Tin/Lead | 848-AG11D-ESL | 848-AG11D | 48 | | Low Gold | Tin/Lead |
| 824-AG31D-ESL | | 24 | | Low Gold | Tin/Lead | 848-AG12D-ES | 848-AG12D | 48 | | Low Gold | Tin/Lead |
| 824-AG32D-ES | 824-AG32D | 24 | | Tin/Lead | Tin/Lead | 348486 | 348486 | 50 | .600 (15,24) | Gold | Tin/Lead |
| 348476 | 348476 | 24 | | Gold | Tin/Lead | 348488 | 348488 | 50 | .900 (22,86) | Gold | Tin/Lead |
| 824-AG65D-ES | 824-AG65D | 24 | | Gold | Gold | | | | | | |
| 824-AG65D-ESL | | 24 | .400 | Low Gold | Gold | | | | | | |
| 824-AG66D-ES | 824-AG66D | 24 | (10,16) | Low Gold | Gold | | | | | | |
| 824-AG66D-ESL | | 24 | | Low Gold | Tin/Lead | | | | | | |
| 824-AG14D-ES | 824-AG14D | 24 | | Tin/Lead | Tin/Lead | | | | | | |

Note: Before ordering, see Cross Reference in Section 15 for equivalent Tyco Electronics Part Number.

Four Fingered Contact Open Insulator**PART NUMBERS**

| Economy Series | Premium Series | Position | Centerline | Contact | Sleeve | Economy Series | Premium Series | Position | Centerline | Contact | Sleeve |
|------------------------|---------------------|----------|-----------------|--------------|------------------|----------------|----------------|----------|-----------------|----------------------|----------|
| 348487 | 348487 | 52 | .600 (15,24) | Gold | Tin/Lead | 864-AG10D-ESL | 864-AG11D | 64 | .900 | Low Gold | Gold |
| 348489 | 348489 | 52 | .900 (22,86) | Gold | Tin/Lead | 864-AG11D-ES | 864-AG11D-ESL | 64 | .900 (22,86) | Gold | Tin/Lead |
| 348490 864-AG10D-ES | 348490 864-AG10D | 64 | .900 (22,86) | Gold Gold | Tin/Lead Gold | 864-AG12D-ES | 864-AG12D | 64 | .900 | Low Gold Tin/Lead | Tin/Lead |

Economy and Premium Series - .180" (4,57) PC Tail Pins

8XX-AG44D-XXX - Gold contact, tin/lead sleeve

8XX-AG45D-XXX - Gold contact, gold sleeve

8XX-AG43D-XXX - Tin/lead contact, tin/lead sleeve

Note: Part numbers in this chart and in detail shown refer to a .125" (3,18) PC Tail Pin

For wire-wrap sockets or 24 position on .300" (7,62) or .400" (10,16) in high retention or .180" (4,57) tails, please consult Tyco Electronics.

Note: Before ordering, see Cross Reference in Section 15 for equivalent Tyco Electronics Part Number.

High Retention Series

8XX-AG34D - Gold contact, tin/lead sleeve

8XX-AG33D - Gold contact, gold sleeve

8XX-AG38D - Tin/lead contact, tin/lead sleeve

Surface Mount**800 SM Series**

814-AG11SM

FEATURES:

Tyco Electronics offers the precision machined 800SM Series which achieves compliancy to the board surface and is designed for high temperatures typical of vapor phase and infrared reflow soldering.

- "Butt" style terminals float in plastic housing for compliancy to board surface
- Precision four-fingered inner contacts provide concentric funnel entry for easy flat or round insertion

APPLICATION DIMENSIONS:

- PCB Thickness Range: Standard .062" and .092" (1,57 and 2,34)
- IC Pin Dimension Range: .009" x .015" (0,23 x 0,38) through .011" x .020" (0,28 x 0,51)
.016" to .021" (0,41 to 0,53) round lead
.105" (2,67) min. length

MATERIAL SPECIFICATIONS:

- Insulator.....Thermoplastic polyester, UL rated 94V-0
- Outer Sleeve.....Brass
- Contacts.....Beryllium copper
- Sleeve Plating.....Tin/lead
- Contact Plating.....Gold or tin/lead

PERFORMANCE SPECIFICATIONS:**MECHANICAL**

VibrationPassed MIL-STD-1344, Method 2005.1,
Condition II, 10 G's

Shock.....Passed MIL-STD-1344, Method 2004.1,
Condition C, 100 G's

DurabilityPassed MIL-STD-1344, Method 2016

Inner Contact

Retention7.5 Lbs. per line average

SolderabilityPassed MIL-STD-202F, Method 208

Insertion Force179 Grams (6.3 oz.) average with a .018" (0,46)
dia. polished steel pin

Withdrawal Force63 Grams (2.2 oz.) average with a .018" (0,46)
dia. polished steel pin

ELECTRICAL

Contact Resistance10 Milliohms max.

Contact Rating.....3 Amps

Capacitance1.0 pF per MIL-STD-202, Method 305
(contact to contact)

Insulation Resistance.....5,000 Megohms min. @ 500 VDC per
MIL-STD-1344, Method 3003.1

Dielectric Withstanding

Voltage1,000 Volts RMS per MIL-STD-1344,
Method 3001.1

ENVIRONMENTAL

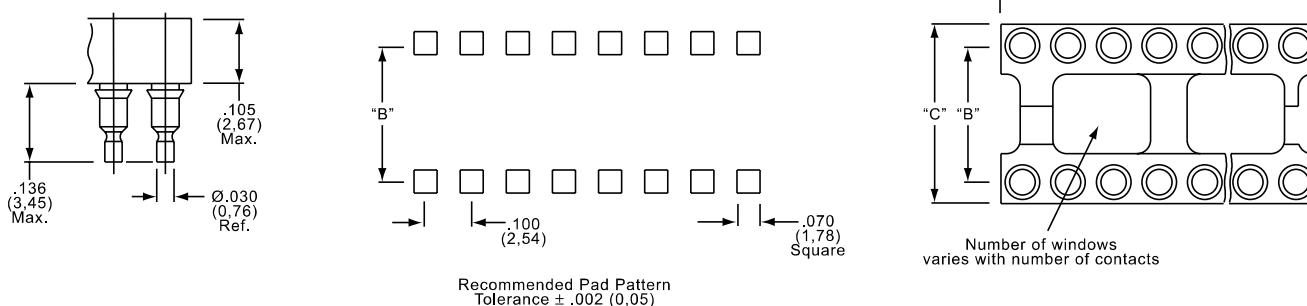
HumidityPassed MIL-STD-1344, Method 1002.2, Cond. II

Thermal ShockPassed MIL-STD-1344, Method 1003.1, Cond. A

Operation TemperatureGold inner contact -55°C to +125°C,

Tin/lead inner contact -55°C to +105°C

800 SM Series



STANDARD CONFIGURATIONS

| Number of Contacts | A | B* | C | Number of Contacts | A | B* | C |
|--------------------|------------------|-----------------|-----------------|--------------------|------------------|-----------------|------------------|
| 8 | .400 (10.16) | .300 (7.62) | .400 (10.16) | 24 | 1.200 (30.48) | .600 (15.24) | .700 (17.78) |
| 14 | .700 (17.78) | | | 28 | 1.400 (35.36) | | |
| 16 | .800 (20.32) | | | 32 | 1.600 (40.64) | | |
| 18 | .900 (22.86) | | | 36 | 1.800 (45.72) | | |
| 20 | 1.000 (25.40) | | | 40 | 2.000 (50.80) | | |
| 22 | 1.100 (27.94) | | | 42 | 2.100 (53.34) | | |
| 24 | 1.200 (30.48) | .300 (7.62) | .400 (10.16) | 48 | 2.400 (60.96) | | |
| 24 | 1.200 (30.48) | .400 (10.16) | .500 (12.70) | 64 | 3.200 (81.28) | .900 (22.86) | 1.000 (25.40) |

* Dimension B $\pm .005$
(0.13)

5

Sockets

PART NUMBERS

| Part Number | Position | Centerline | Contact | Part Number | Position | Centerline | Contact |
|-------------|----------|------------|----------|-------------|----------|------------|----------|
| 808-AG11SM | 8 | .300 | Gold | 824-AG11SM | 24 | .600 | Gold |
| 808-AG12SM | 8 | (7.62) | Tin/Lead | 824-AG12SM | 24 | (15.24) | Tin/Lead |
| 814-AG11SM | 14 | .300 | Gold | 828-AG11SM | 28 | .600 | Gold |
| 814-AG12SM | 14 | (7.62) | Tin/Lead | 828-AG12SM | 28 | (15.24) | Tin/Lead |
| 816-AG11SM | 16 | .300 | Gold | 832-AG11SM | 32 | .600 | Gold |
| 816-AG12SM | 16 | (7.62) | Tin/Lead | 832-AG12SM | 32 | (15.24) | Tin/Lead |
| 818-AG11SM | 18 | .300 | Gold | 836-AG11SM | 36 | .600 | Gold |
| 818-AG12SM | 18 | (7.62) | Tin/Lead | 836-AG12SM | 36 | (15.24) | Tin/Lead |
| 820-AG11SM | 20 | .300 | Gold | 840-AG11SM | 40 | .600 | Gold |
| 820-AG12SM | 20 | (7.62) | Tin/Lead | 840-AG12SM | 40 | (15.24) | Tin/Lead |
| 822-AG11SM | 22 | .300 | Gold | 842-AG11SM | 42 | .600 | Gold |
| 822-AG12SM | 22 | (7.62) | Tin/Lead | 842-AG12SM | 42 | (15.24) | Tin/Lead |
| 824-AG31SM | 24 | .300 | Gold | 848-AG11SM | 48 | .600 | Gold |
| 824-AG32SM | 24 | (7.62) | Tin/Lead | 848-AG12SM | 48 | (15.24) | Tin/Lead |
| 824-AG66SM | 24 | .400 | Gold | 864-AG11SM | 64 | .900 | Gold |
| 824-AG14SM | 24 | (10.16) | Tin/Lead | 864-AG12SM | 64 | (22.86) | Tin/Lead |

Note: Before ordering, see Cross Reference in Section 15 for equivalent Tyco Electronics Part Number.