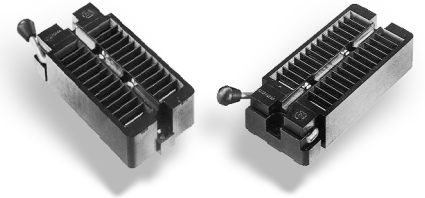




Series 55 Universal Zero-Insertion-Force DIP Test Socket

FEATURES

- Accepts Devices on 0.300 to 0.600 [7.62 to 15.24] Centers
- All Pin Count Sockets go into PCB with either 0.300 or 0.600 [7.62 or 15.24] Centers
- Contacts Normally-closed to Eliminate Dependence on Plastic to Sustain Contact Integrity
- Socket Handle Configured with Closed Contacts (on) when in the Up or Down Position, and Mounted on the Right- or Left-hand Side
- Sockets may be Soldered into PCBs or Plugged into Any Socket or Receptacle



GENERAL SPECIFICATIONS

- **SOCKET BODY:** Black UL 94V-0 glass-filled Polyphenylene Sulfide (PPS)
- **HANDLE:** Stainless Steel
- **HANDLE KNOB:** Brass 360, 1/2-hard
- **CONTACTS:** BeCu 172 per QQ-C-533 **-OR-** Spinodal Alloy
- **CONTACT PLATING:** 50µ [1.27µ] min. Ni under-plate per QQ-N-290, over-plated with either 200µ [5.08µ] min. matte Sn per ASTM B545-97 **-OR-** 50µ [1.27µ] NiB
- **CONTACT CURRENT RATING:** 1 amp
- **INSULATION RESISTANCE:** 1000 MΩ min.
- **DIELECTRIC WITHSTANDING VOLTAGE:** 1000 VAC
- **LIFE CYCLE:** 25,000 to 50,000 cycles
- **OPERATING TEMPERATURE:** 221°F [105°C] Sn plating; 302°F [150°C] Au plating; 392°F [200°C] NiB plating
- **RETENTION FORCE (closed):** 55g/pin based on a 0.020 [0.51] dia. test lead
- **ACCEPTS LEADS:** 0.015-0.045 [0.38-1.14] wide, 0.110-0.280 [2.79-7.11] long

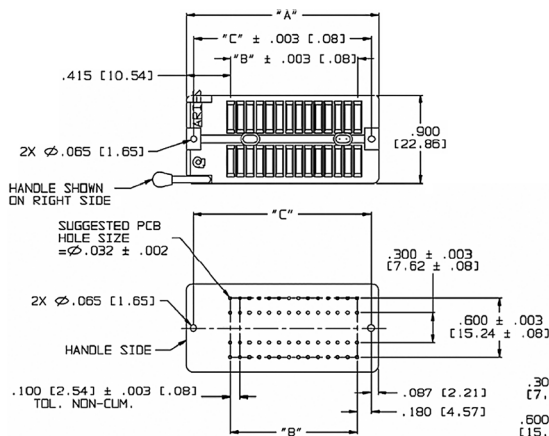
MOUNTING CONSIDERATIONS

- See Socket Footprint

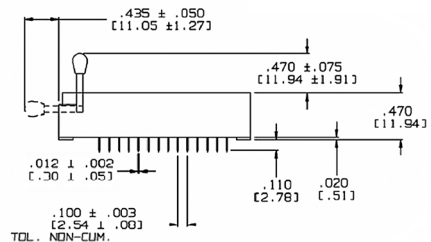
ORDERING INFORMATION

XX-X55X-X X

- Plating**
 - 0 = Sn over Ni
 - OTL = Sn/Pb over Ni
 - 1 = Au over Ni
 - 6 = NiB (Spinodal only)
- Termination**
 - 1 = Solder Pin Tail
- Handle Options**
 - 1 = Left up is closed
 - 2 = Right up is closed
 - 3 = Left down is closed
 - 4 = Right down is closed (std)
- Row-to-Row Spacing (btm)**
 - 3 = 0.300 [7.62]
 - 6 = 0.600 [15.24]
- No. of Pins**
 - 24, 28, 32, 36, 40, 42, 44, 48



$"A" = (\text{NO. OF PINS PER ROW} \times 0.100 [2.54]) + 0.590 [14.99]$
 $"B" = (\text{NO. OF PINS PER ROW} - 1) \times 0.100 [2.54]$
 $"C" = (\text{NO. OF PINS PER ROW} \times 0.100 [2.54]) + 0.415 [10.54]$



ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FOR TEST SOCKET RECEPTACLES, SEE [DATA SHEET 10003](#)

DO NOT USE THIS SOCKET IN A BURN-IN OVEN WITH CONTACTS IN OPEN POSITION, AS IT WILL DAMAGE THE SOCKET

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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10001
 Rev. 1.7
 1 of 1



High-Temperature (250°C) Universal DIP ZIF Test Socket – Series 55

FEATURES

- Universal test socket accepts devices on 0.300 to 0.600 [7.62 to 15.24] centers
- All pin count sockets go into PCB with either 0.300 or 0.600 [7.62 or 15.24] centers
- Contacts are normally closed to eliminate dependence on plastic to sustain contact integrity
- Socket handle configured with closed contacts (on) when in the up or down position, and mounted on the right- or left-hand side
- Sockets can be soldered into PCBs or fit into Test Socket Receptacles (see [Data Sheet 10003](#))



GENERAL SPECIFICATIONS

- **SOCKET BODY:** Natural UL 94V-0 Glass-filled Polyetheretherketone (PEEK)
- **HANDLE:** Stainless Steel
- **CONTACTS:** BeNi 360, 1/2-hard
- **CONTACT PLATING:** 50µ [1.27µ] NiB
- **CONTACT CURRENT RATING:** 1 amp
- **OPERATING TEMPERATURE:** -55°C to 250°C max. (300°C special order)
- **RETENTION FORCE (closed):** 55g/pin based on a 0.020 [0.51] dia. test lead
- **INSULATION RESISTANCE:** 1000 MΩ min.
- **DIELECTRIC WITHSTANDING VOLTAGE:** 1000 VAC
- **LIFE CYCLE:** 25,000 to 50,000 cycles
- **ACCEPTS LEADS:** 0.015-0.045 [0.38-1.14] wide, 0.110-0.280 [2.79-7.11] long

MOUNTING CONSIDERATIONS

- See **SOCKET FOOTPRINT** below

ORDERING INFORMATION

XX-X55X-X X

Plating

8 = NiB

Termination

1 = Solder Pin Tail

Handle Options

1 = Left, up is on (closed)

2 = Right, up is on (closed)

3 = Left, down is on (closed)

4 = Right, down is on (closed) Std

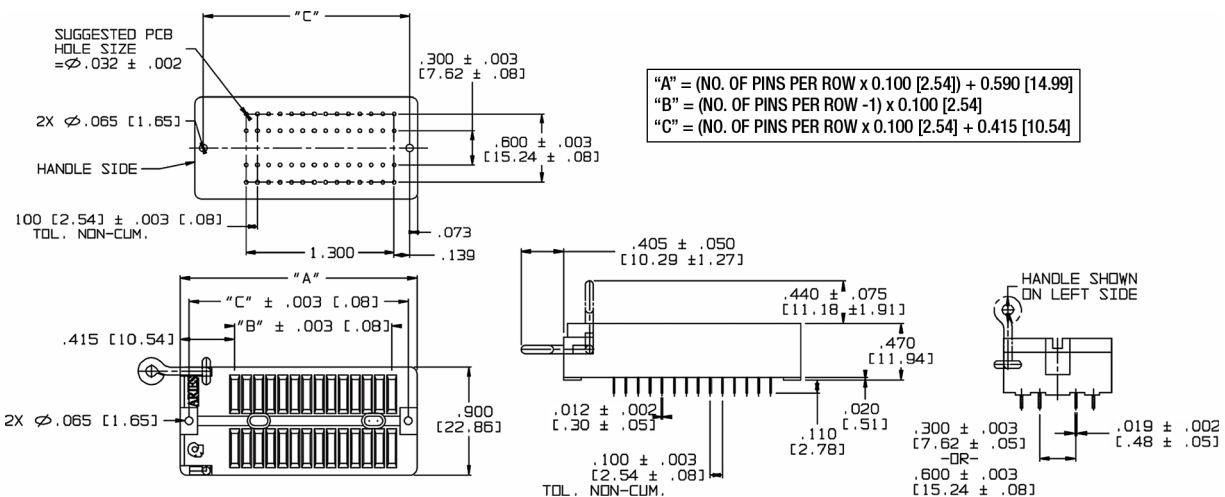
Row-to-Row Spacing (btm)

3 = 0.300 [7.62]

6 = 0.600 [15.24]

No. of Pins

24, 28, 32, 36, 40, 42, 44, 48



ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ± 0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FOR TEST SOCKET RECEPTACLES, SEE [DATA SHEET 10003](#)

DO NOT USE THIS SOCKET IN A BURN-IN OVEN WITH CONTACTS IN OPEN POSITION, AS IT WILL DAMAGE THE SOCKET

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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Rev. 1.7
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Series 6556 Universal Test Socket Receptacle

FEATURES

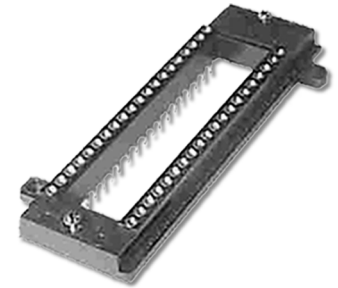
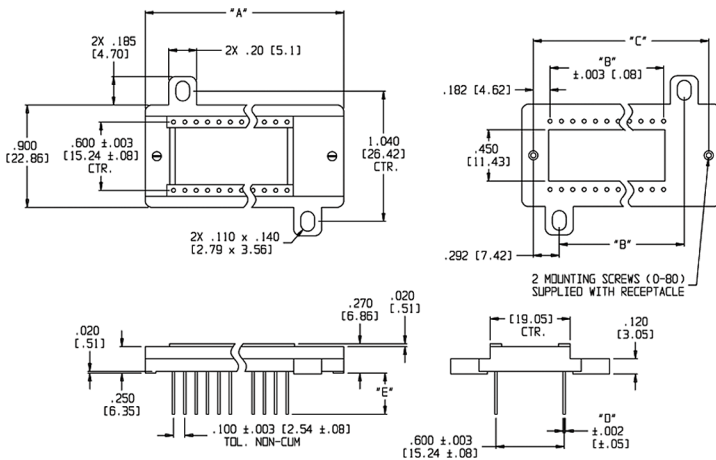
- Sturdy, Open-frame, Easily Mounts to PC Boards
- Easy Replacement of Test Sockets
- Threaded Inserts at Both Ends of the Receptacle provides Firm and Positive Connection for Test Socket
- Choice of 4 Collet Pin Styles makes the Receptacle Useful for Any Interconnection Method

GENERAL SPECIFICATIONS

- **SOCKET BODY:** black UL 94V-0 glass-filled Polyphenylene Sulfide (PPS)
- **PIN BODY:** Brass 360 1/2-hard per UNS C36000 ASTM B16/B16M-05
- **PIN BODY PLATING:** 100 μ [2.54 μ] Ni underplate per SAE AMS-QQ-N-290, overplated with either: 200 μ [5.08 μ] min. matte Sn per ASTM B545-97(2004)e1 **-OR-** 200 μ [5.08 μ] min. 93/7 Sn/Pb per ASTM B545 **-OR-** 10 μ [0.25 μ] min. Au per MIL-G-45204
- **4-FINGER COLLET CONTACT:** BeCu per UNS C17200 ASTM B194-08
- **CONTACT PLATING:** 30 μ [0.76 μ] min. Au per MIL-G-45204 over 50 μ [1.27 μ] min. Ni per QQ-N-290
- **HARDWARE:** Stainless Steel and Ni-plated Brass
- **CONTACT CURRENT RATING:** 3 amps
- **OPERATING TEMPERATURE:** 221°F [105°C] Sn plating; 302°F [150°C] Au plating
- **ACCEPTS LEADS:** 0.015-0.025 [0.38-0.64] in dia., 0.110-0.150 [2.54-3.81] long
- **INSERTION FORCE:** 180g/pin, based on 0.018 [0.46] dia. test lead
- **WITHDRAWAL FORCE:** 90g/pin, based on 0.018 [0.46] dia. test lead
- **NORMAL FORCE:** 140g/pin, based on 0.018 [0.46] dia. test lead

MOUNTING CONSIDERATIONS

- See DIMENSION TABLE below



ORDERING INFORMATION

XX-6556-1 X

Handle Options

- 0 = Sn Body; Au Collet
- OTL = Sn/Pb Body; Au Collet
- 1 = Au Body; Au Collet

Pin Style (see Page 2)

- 1 = Solder Tail
- 2 = 2-level Wire Wrap
- 3 = 3-level Wire Wrap
- 4 = Solder Cup

Series

Pins

- 24, 28, 32, 36, 40, 42, 44, 48

# Pins	Dim. "A"	Dim. "B"	Dim. "C"
24	1.790 [45.47]	1.100 [27.94]	1.615 [41.02]
28	1.990 [50.55]	1.300 [33.02]	1.815 [46.10]
32	2.190 [55.63]	1.500 [38.10]	2.015 [51.18]
36	2.390 [60.71]	1.700 [43.18]	2.215 [56.26]
40	2.590 [65.79]	1.900 [48.26]	2.415 [61.34]
42	2.660 [67.56]	2.000 [50.80]	2.515 [63.88]
44	2.790 [70.87]	2.100 [53.34]	2.615 [66.42]
48	2.990 [75.85]	2.300 [58.42]	2.815 [71.50]

ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FOR UNIVERSAL TEST SOCKET SERIES X55X: SEE DATA SHEET 10001

FOR HIGH-TEMP VERSION: SEE DATA SHEET 10002

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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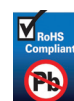


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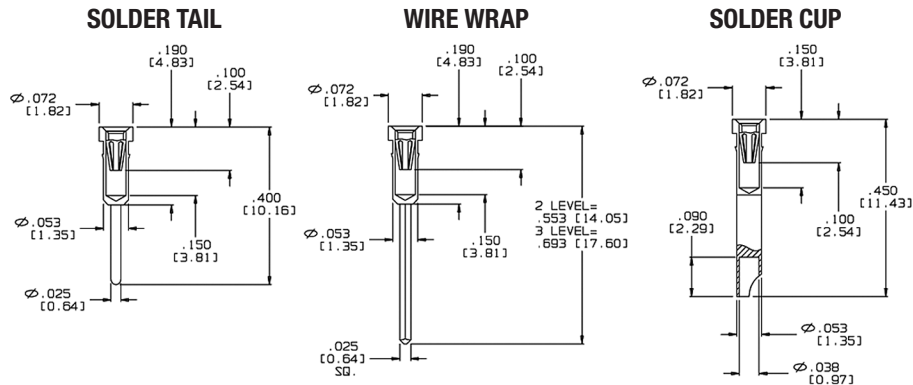
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10003
Rev. 1.2
1 of 2



Series 6556 Universal Test Socket Receptacle



Pin Style	Dim. "D" ±0.002 [0.05]	Dim. "E"	Rec. PCB Hole Dia. Size ±0.002 [0.05]
1	0.025 [0.64]	0.130 [3.30]	0.035 [0.89]
2	0.025 [0.64]	0.283 [7.19]	0.044 [1.12]
3	0.025 [0.64]	0.423 [10.74]	0.044 [1.12]
4	0.053 [1.35]	0.180 [4.57]	0.063 [1.60]

ALL DIMENSIONS: INCHES [MILLIMETERS]
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED
 FOR UNIVERSAL TEST SOCKET SERIES X55X: SEE [DATA SHEET 10001](#)
 FOR HIGH-TEMP VERSION: SEE [DATA SHEET 10002](#)
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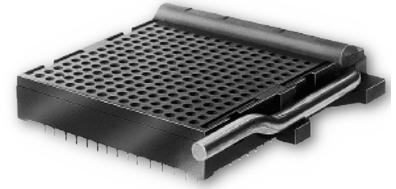
10003
Rev. 1.2
2 of 2



PGA ZIF Test & Burn-in Socket for Any Footprint on Std 8x8 to 21x21 Grid

FEATURES

- Strong Metal Cam Activates Normally-closed Contacts, Preventing Dependency on Plastic for Contact Force
- Handle mounted on Right- or Left-hand Side
- Any Footprint Accepted on Standard 13x13 to 21x21 Grid



GENERAL SPECIFICATIONS

- **SOCKET BODY:** black UL 94V-0 Polyphenylene Sulfide (PPS)
- **CONTACTS:** BeCu 174, 1/2-hard –OR– Spinodal
- **BeCu CONTACT PLATING OPTIONS:** 30μ [0.762μ] min. Au per MIL-G-45204 on contact area, 200μ [5.08μ] min. matte Sn per ASTM B545-97 on solder tail, both over 30μ [0.762μ] min. Ni per QQ-N-290 all over
- **SPINODAL PLATING CONTACT ONLY:** 50μ [1.27μ] min. NiB
- **HANDLE:** Stainless Steel
- **CONTACT CURRENT RATING:** 1 amp
- **OPERATING TEMPERATURES:** -85°F to 257°F [-65°C to 125°C] Au plating, -85°F to 392°F [-65°C to 200°C] NiB (Spinodal)
- **ACCEPTS LEADS:** 0.014-0.026 [0.36-0.66] dia., 0.120-0.290 [3.05-7.37] long

MOUNTING CONSIDERATIONS

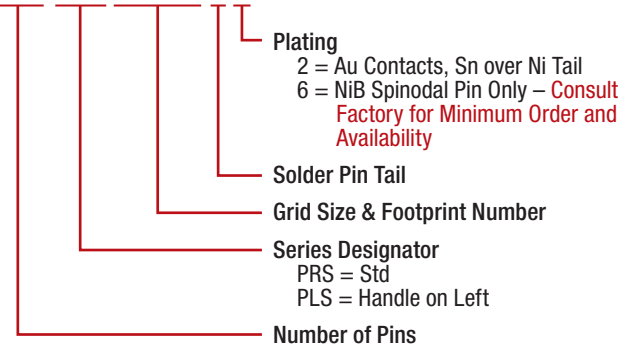
- **SUGGESTED PCB HOLE SIZE:** 0.032 ±0.002 [0.81 ±0.05] dia.
- See *PCB FOOTPRINT* below
- Plugs into standard PGA sockets

Grid Size	No. of Pins	Dim. "C"	Dim. "A"	Dim. "B"	Dim. "D"
8 x 8 *	64	0.700 [17.78]	1.695 [43.05]	1.110 [28.19]	1.275 [32.39]
9 x 9	81	0.800 [20.32]			
12 x 12 *	144	1.100 [27.94]	1.894 [48.10]	1.510 [38.35]	1.675 [42.55]
13 x 13	169	1.200 [30.48]			
14 x 14 *	196	1.300 [33.02]	2.094 [53.20]	1.710 [43.43]	1.875 [47.63]
15 x 15	225	1.400 [35.56]			
16 x 16 *	256	1.500 [38.10]	2.294 [58.27]	1.910 [48.51]	2.075 [52.71]
17 x 17	289	1.600 [40.64]			
18 x 18 *	324	1.700 [43.18]	2.494 [63.35]	2.110 [53.59]	2.275 [57.79]
19 x 19	361	1.800 [45.72]			
20 x 20 *	400	1.900 [48.26]	2.694 [68.43]	2.310 [58.67]	2.475 [62.87]
21 x 21	441	2.000 [50.80]			

* Top- and Right-hand Side Rows left out

ORDERING INFORMATION

XXX-PXX XXXXX-1 X



Plating

2 = Au Contacts, Sn over Ni Tail
6 = NiB Spinodal Pin Only – Consult Factory for Minimum Order and Availability

Solder Pin Tail

Grid Size & Footprint Number

Series Designator

PRS = Std
PLS = Handle on Left

Number of Pins

ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED

SPECIAL HANDLE REQUIREMENTS: CONSULT FACTORY

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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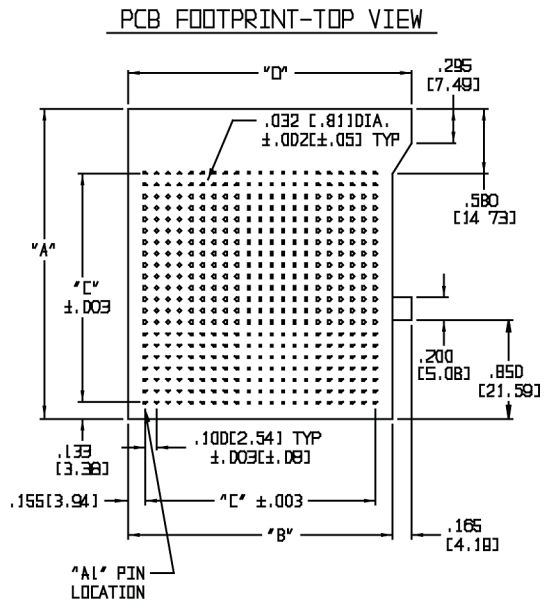
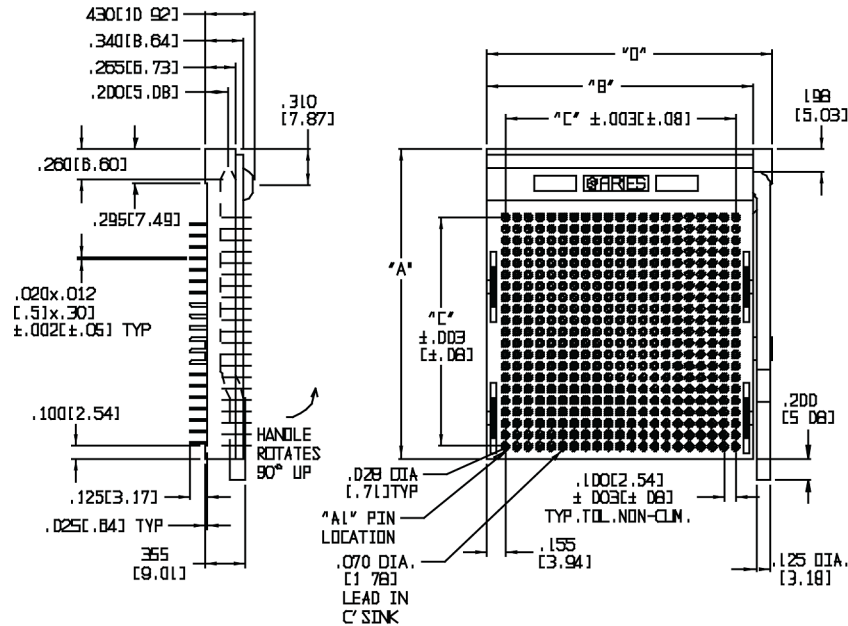
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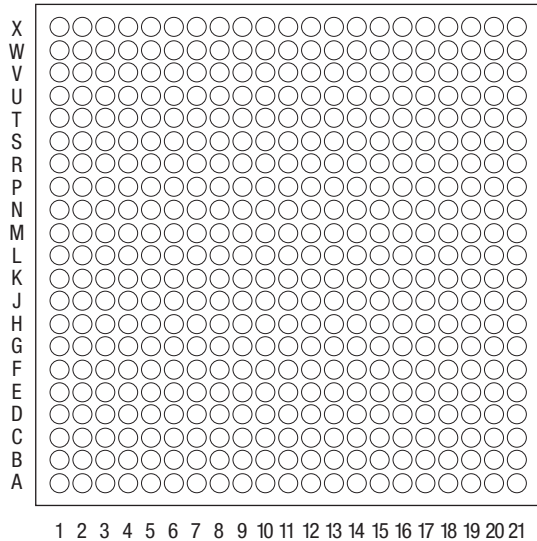
10004
Rev. 1.6
1 of 2



PGA ZIF Test & Burn-in Socket for Any Footprint on Std 8x8 to 21x21 Grid

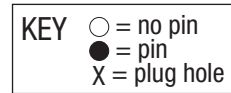


TOP VIEW



SPECIAL FOOTPRINT INSTRUCTIONS

1. Make a copy of this worksheet
2. Fill-in circles for footprint desired using the key below
3. Fill-in the information below, including Series and Plating options. See Ordering Information above
4. Send worksheet to Aries for prompt quote



COMPANY NAME _____

ADDRESS _____

CITY _____

REQUESTED BY _____

PHONE _____

DATE _____

TOTAL NUMBER OF PINS _____

SERIES (circle one) PRS PLS

PLATING (circle one) 2 6

ALL DIMENSIONS: INCHES [MILLIMETERS]
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED
 SPECIAL HANDLE REQUIREMENTS: CONSULT FACTORY
 CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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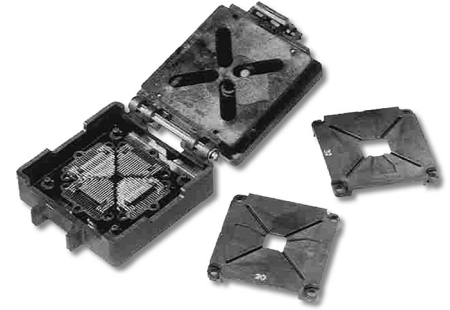




Series 537 'Live Bug' Type Universal PLCC ZIF Test Socket

FEATURES

- Socket takes 7 Sizes of PLCC Footprints with Insert Plate, P/N XX-537-20
- PLCC is inserted 'Live Bug' (pins down) into position over Bed; Top half of Clamshell is Closed for Testing, Programming, etc. Bottom Solder Pin Tails are the Ends of the Contacts or 'Bed,' thus Permits Mounting to PC Board
- Accepts JEDEC MO-047AA-AH PLCCs and JEDEC MO-044AA-AB Ceramics with 20, 28, 44, 52, 68, or 84 Square Leads, as well as JEDEC MS-016 PLCCs with 32 Rectangular Leads



GENERAL SPECIFICATIONS

- **PLASTIC:** black UL 94V-0 glass-filled Polyphenylene Sulfide (PPS)
- **CONTACT PIN:** BeCu 172 heat-treated
- **CONTACT PLATING:** 12 μ [0.31 μ] min. Au per MIL-G-45204 over 100 μ [2.54 μ] min. Ni per SAE AMS-QQ-N-290 over 20 μ [0.51 μ] Cu per MIL-C-14550
- **HARDWARE:** Stainless Steel
- **OPERATING TEMPERATURE:** 85°F to 257°F [-65°C to 125°C]
- **LIFE CYCLE:** 10,000 insertions, maximum

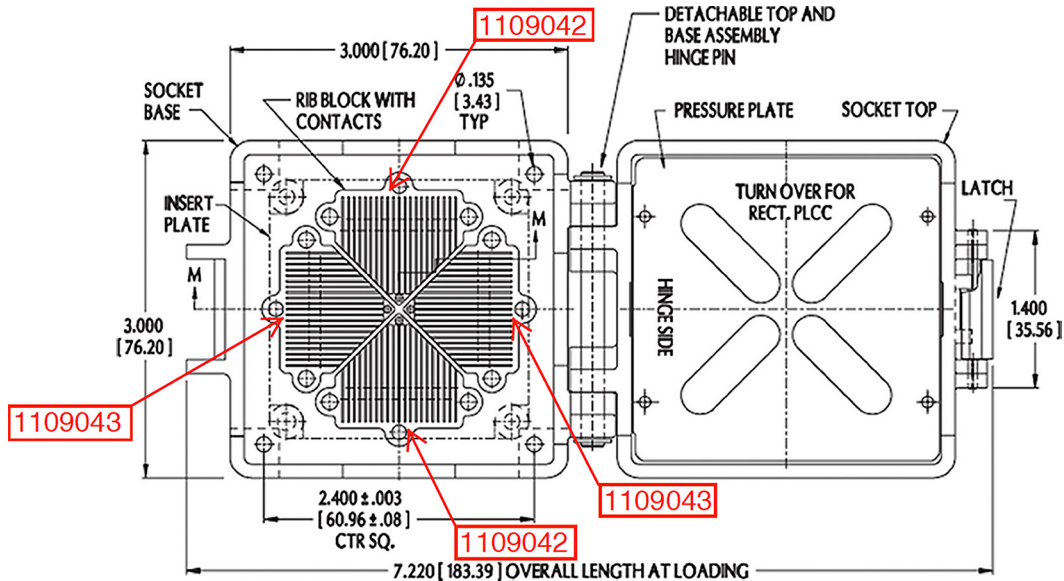
ORDERING INFORMATION

84-537-21 – Socket Only, No Insert Plates

84-537-21-7 – Socket and 7 Insert Plates

MOUNTING CONSIDERATIONS

- **SUGGESTED PCB HOLE SIZE:** 0.032 \pm 0.002 [0.81 \pm 0.05] dia.



ALL DIMENSIONS: INCHES [MILLIMETERS]
ALL TOLERANCES: \pm 0.005 [0.13] UNLESS OTHERWISE SPECIFIED
FOR ADDITIONAL INSERT PLATES, SEE [DATA SHEET 10012](#)
CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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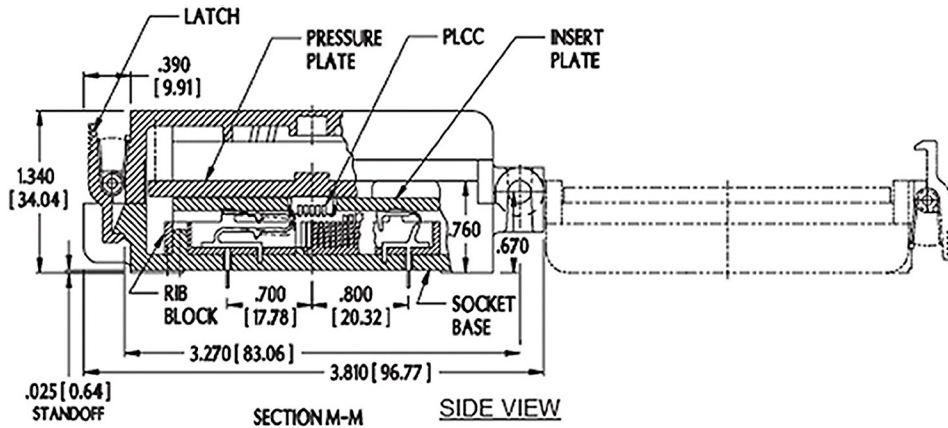
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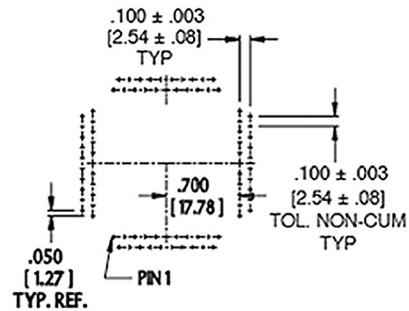
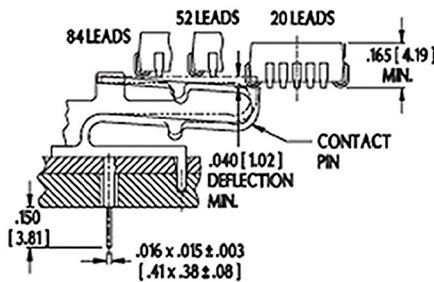
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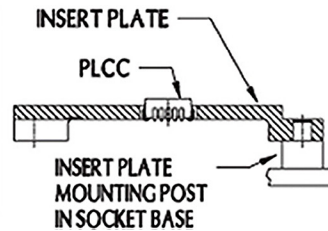
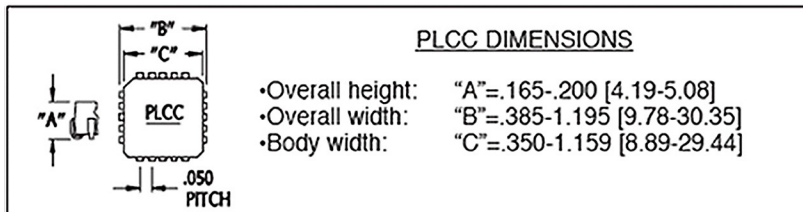
Series 537 'Live Bug' Type Universal PLCC ZIF Test Socket



CONTACT DETAIL



Top View Footprint
84 Pin Terminals



ALL DIMENSIONS: INCHES [MILLIMETERS]
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED
 FOR ADDITIONAL INSERT PLATES, SEE [DATA SHEET 10012](#)
 CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

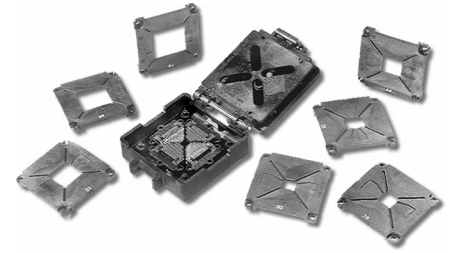
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Series 537 Insert Plates for Universal PLCC ZIF Test Socket

FEATURES

- Conveniently Hand-insert 7 Separate Insert Plates into 'Live Bug' Universal PLCC ZIF Test Socket (P/N 84-537-21) to hold 7 Differently-sized PLCC Footprints
- Four Mounting Holes (2 Bifurcated) Mate with Mounting Post in Socket Base for Secure Assembly



GENERAL SPECIFICATIONS

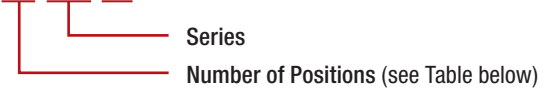
- **INSERT:** black UL 94V-0 glass-filled Polyphenylene Sulfide (PPS)
- **OPERATING TEMPERATURE:** -85°F [-65°C] to 500°F [260°C]
- **CONTACT BLOCK AND LATCH HINGE:** available individually

MOUNTING CONSIDERATIONS

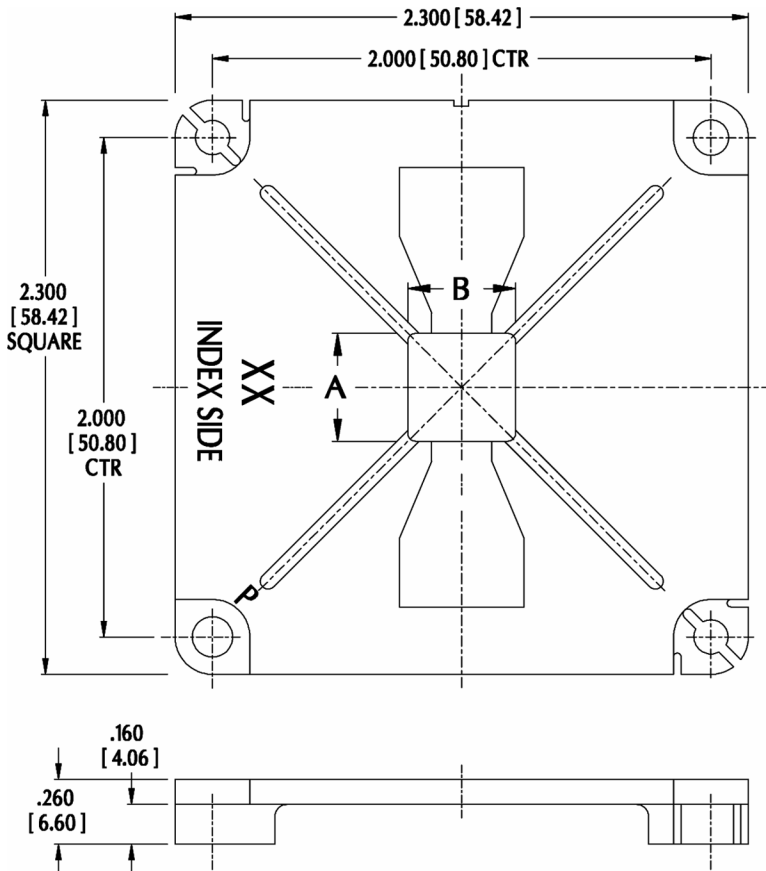
- **SUGGESTED PCB HOLE SIZE:** 0.035 ±0.002 [0.89 ±0.05] dia.

ORDERING INFORMATION

XX-537-20



USE P/N 1110832 WHEN ORDERING ALL SEVEN INSERT PLATES



No. Positions	Dim "A"	Dim. "B"
20	0.395 to 0.397 [10.03 to 10.08]	0.395 to 0.397 [10.03 to 10.08]
28	0.495 to 0.497 [12.57 to 12.62]	0.495 to 0.497 [12.57 to 12.62]
32	0.495 to 0.497 [12.57 to 12.62]	0.595 to 0.597 [15.11 to 15.16]
44	0.695 to 0.697 [17.65 to 17.70]	0.695 to 0.697 [17.65 to 17.70]
52	0.795 to 0.797 [20.19 to 20.24]	0.795 to 0.797 [20.19 to 20.24]
68	0.995 to 0.997 [25.27 to 25.32]	0.995 to 0.997 [25.27 to 25.32]
84	1.195 to 1.197 [30.35 to 30.40]	1.195 to 1.197 [30.35 to 30.40]

ALL DIMENSIONS: INCHES [MILLIMETERS]
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED
 FOR TEST SOCKET, SEE [DATA SHEET 10010](#)
 CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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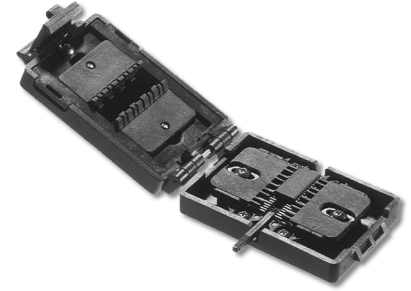
10012
Rev. 2.1
1 of 1



Series 547 Universal SOIC Zero-Insertion-Force Test Socket

FEATURES

- Insert up to 44-pin Devices without Bending or Damaging Device Legs
- Insert and Remove Components from Socket without Force
- Accepts SOIC Gull-wing and J-Pb Devices, up to 44 Pins, on 0.050 [1.27] Pb Pitch, Body Widths from 0.150 to 0.600 [3.81 to 15.24]
- Optional Device Lifter for Easy Package Removal



GENERAL SPECIFICATIONS

- **BODY MATERIAL:** black UL 94V-0 glass-filled Polyphenylene Sulfide (PPS)
- **CONTACTS:** BeCu 172 per QQ-C-533
- **CONTACT PLATING:** 20µ [0.51µ] min. Au per MIL-G-45204 over 100µ [2.54µ] min. Ni per QQ-N-290 over 20µ [0.51µ] min. Cu per MIL-C-14550
- **HARDWARE:** Stainless Steel
- **CONTACT CURRENT RATING:** 1 amp
- **OPERATING TEMPERATURE:** 257°F [125°C]

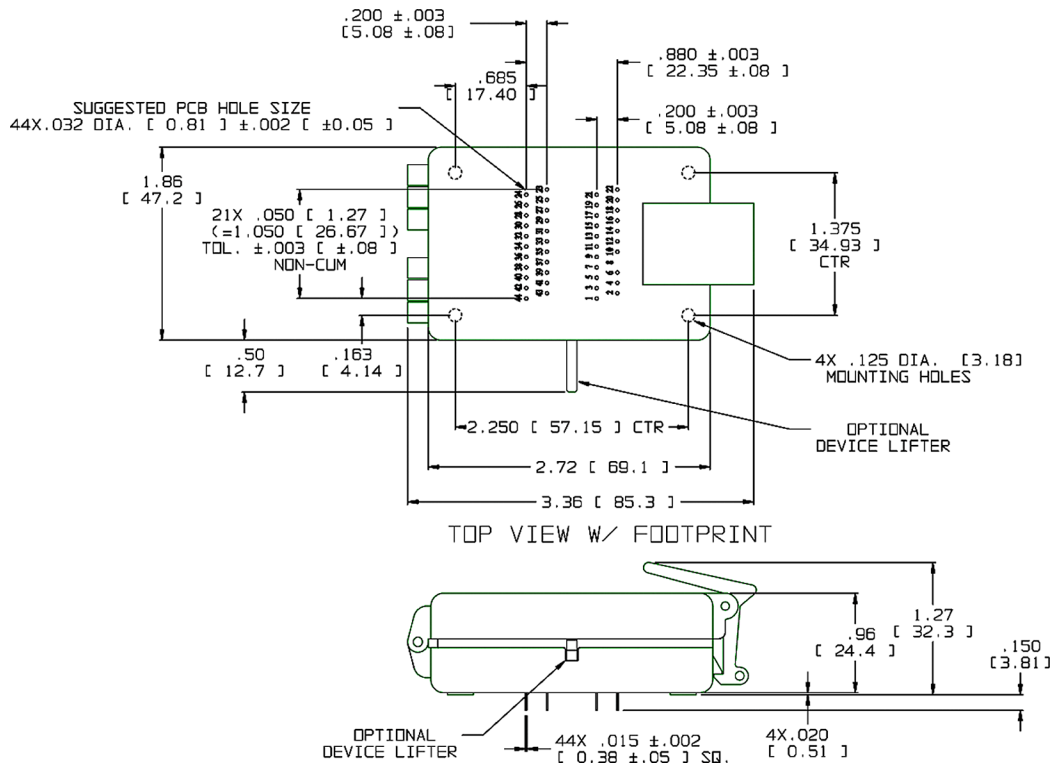
ORDERING INFORMATION

44-547-11 – Without Lifter

44-547-11E – With Lifter

MOUNTING CONSIDERATIONS

- See SCHEMATIC below



ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FOR SOCKET SETUP PER DEVICE, SEE DATA SHEET 10020 OR REQUEST SALES DRAWING 1109450

FOR SOIC TO 0.600 [15.24] DIP ADAPTER, SEE DATA SHEET 10016

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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Rev. 2.1
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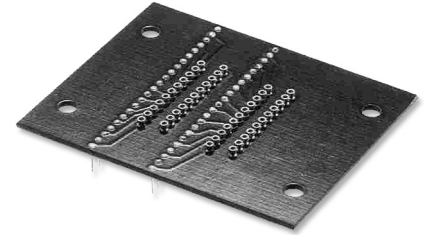
Series 647 Universal SOIC-to-DIP 0.600 [15.24] Adapter

FEATURES

- 44-pin Adapter for Mounting Aries Series 547 Universal SOIC ZIF Test Socket to 0.600 [15.24] DIP PCB Layout

GENERAL SPECIFICATIONS

- **BODY MATERIAL:** black 0.062 [1.58] thick FR-4 –OR– IS410 per IPC A4101A/26, 0.094 [2.39] thick, with 1-oz. min. Cu traces
- **FEMALE PIN BODY:** Brass 360 1/2-hard per UNS C36000 ASTM-B16-00
- **FEMALE PIN BODY PLATING:** 200 μ [5.08 μ] min. Sn per ASTM B545 Type 1 over 100 μ [2.54 μ] min. Ni per SAE AMS-QQ-N-290
- **4-FINGER COLLET CONTACT:** BeCu per UNS C17200 ASTM-B194-01
- **COLLET CONTACT PLATING:** 10 μ [0.254 μ] min. Au per MIL-G-45204 over 50 μ [1.27 μ] min. Ni per SAE AMS-QQ-N-290
- **MALE PIN:** Phosphor Bronze 544 UNS C5400 ASTM B139-90
- **MALE PIN PLATING:** 200 μ [5.08 μ] min. Sn per ASTM B545 Type 1 over 100 μ [2.54 μ] min. Ni per SAE AMS-QQ-N-290
- **COLLET CONTACT CURRENT RATING:** 3 amps
- **OPERATING TEMPERATURE:** 221°F [105°C]
- **INSERTION FORCE:** 180g/pin, based on a 0.018 [0.46] dia. test lead
- **WITHDRAWAL FORCE:** 90g/pin, based on a 0.018 [0.46] dia. test lead
- **NORMAL FORCE:** 140g/pin, based on a 0.018 [0.46] dia. test lead

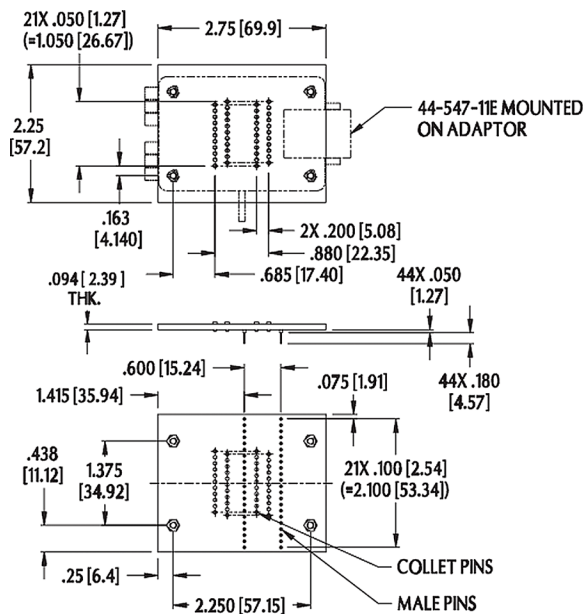


ORDERING INFORMATION

Specify **44-647-10**

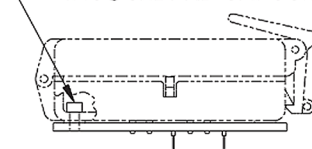
MOUNTING CONSIDERATIONS

- **SUGGESTED PCB HOLE SIZE:** 0.028 \pm 0.002 [0.71 \pm 0.05] dia.

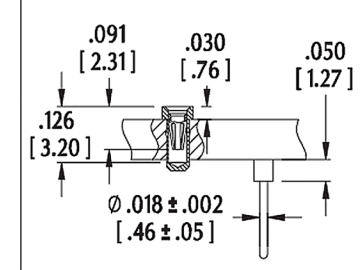


MOUNTING CONSIDERATIONS

4X SOCKET HD CAP SCR #4-40



CONTACT DETAIL



ALL DIMENSIONS: INCHES [MILLIMETERS]
ALL TOLERANCES: \pm 0.005 [0.13] UNLESS OTHERWISE SPECIFIED
FOR TEST SOCKETS, SEE DATA SHEET 10015
CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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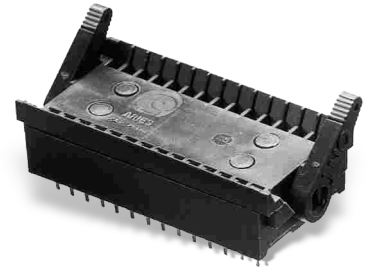
10016
Rev. 2.1
1 of 1



Series 516 Zero-Insertion-Force Socket

FEATURES

- Choice of 24-, 28-, or 40-pin Count Devices Inserted without Bending or Damaging Device Legs
- Insert and Remove Components from Socket without Force
- Contacts Normally-open and Closed by Unique Cam Action Controlled by Dual Lever Arms
- Last 15° of Cam Movement provides Wiping Action of the Device Legs Removing any Residue, Ensuring Gas-tight Seal
- Tapered Entry Guides Device Legs into Mating Socket Contacts



GENERAL SPECIFICATIONS

- **BODY, HANDLE, CAM:** black UL 94V-0 glass-filled 4/6 Nylon
- **PINS:** BeCu 170 or 172, 1/2-hard
- **PIN PLATING:** 10μ [0.254μ] min. Au per MIL-G-45204 over 50μ [1.27μ] min. Ni per SAE AMS-QQ-N-290
- **CONTACT CURRENT RATING:** 1 amp
- **OPERATING TEMPERATURE:** 257°F [125°C]
- **MINIMUM RETENTION FORCE (when closed):** 15g/lead, based on a 0.008 [0.20] thick test lead
- **ACCEPTS LEADS:** from 0.075 to 0.250 [1.91 to 6.35]

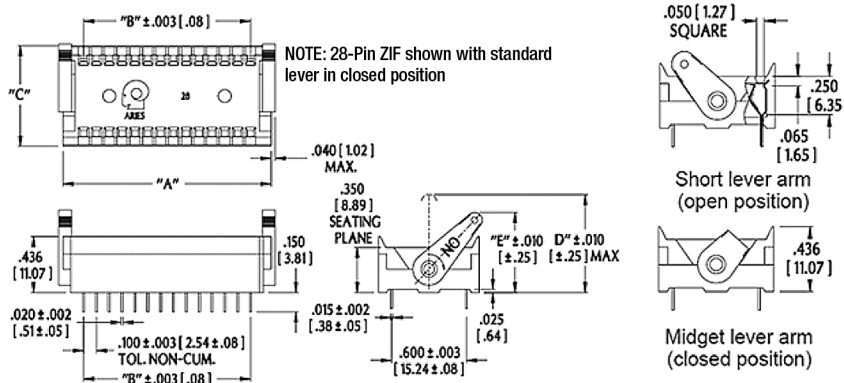
MOUNTING CONSIDERATIONS

- **SUGGESTED PCB HOLE SIZE:** 0.035 ±0.002 [0.89 ±0.05] dia.

ORDERING INFORMATION

XX-516-11 X

- Optional Lever Arm
S = Short
M = Midget
- Plating
11 = Au over Ni
- Series
- Pins
24, 28, 40



$$\begin{aligned}
 \text{"A"} &= (\text{NO. OF PINS PER ROW} \times 0.100 [2.54]) + 0.220 [5.588] \\
 \text{"B"} &= (\text{NO. OF PINS PER ROW} - 1) \times 0.100 [2.54]
 \end{aligned}$$

No. of Pins	Standard Lever Arm			Short Lever Arm		Midget Lever Arm	
	Dim. "C"	Dim. "D"	Dim. "E"	Dim. "D"	Dim. "E"	Dim. "D"	Dim. "E"
24	0.785 [19.94]	0.76 [19.30]	0.630 [16.00]	0.60 [15.24]	0.520 [13.21]	0.41 [10.41]	0.42 [10.67]
28	0.785 [19.94]	0.76 [19.30]	0.630 [16.00]	0.60 [15.24]	0.520 [13.21]	0.41 [10.41]	0.42 [10.67]
40	0.780 [19.81]	0.76 [19.30]	0.630 [16.00]	0.60 [15.24]	0.520 [13.21]	0.41 [10.41]	0.42 [10.67]

ALL DIMENSIONS: INCHES [MILLIMETERS]
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED
 FOR SERIES 526 LO-PRO@FILE ZIF SOCKET, SEE DATA SHEET 10018
 CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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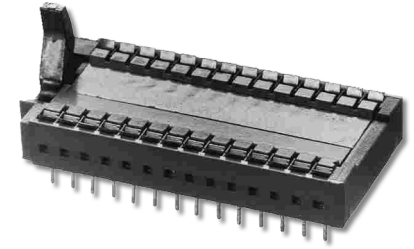
10017
 Rev. 1.2
 1 of 1



Series 526 Lo-PRO® file Zero-Insertion-Force Socket

FEATURES

- Choice of 24-, 28-, or 40-pin Count Devices Inserted without Bending or Damaging Device Legs
- Insert and Remove Components from Socket without Force
- Metal Cam provides Strong, Smooth Action as it moves to a Positive Stop, Compressing the Double-sided Contacts, Ensuring Gas-tight Seal
- Test Point Openings Reach All Pins

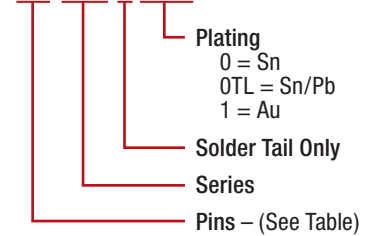


GENERAL SPECIFICATIONS

- **PLASTIC BODY:** Black UL 94V-0 Glass-filled 4/6 Nylon
- **CONTACTS:** Spring-tempered BeCu 172
- **CONTACT PLATING:** 200µ [5.08µ] min. matte Sn per ASTM B545-97(2004) over 50µ [1.27µ] min. Ni per SAE AMS-QQ-N-290 –OR– 200µ [5.08µ] min. 90/10 Sn/Pb per MIL-T-10727 over 50µ [1.27µ] min. Ni per SAE AMS-QQ-N-290 –OR– 10µ [0.25µ] min. Au per MIL-G-45204 over 50µ [1.27µ] min. Ni per SAE AMS-QQ-N-290 – consult factory for availability
- **CAM:** lightweight, strong, and rigid cast Zn
- **OPERATING TEMPERATURE:** -67°F to 221°F [-55°C to 105°C] for Sn & Sn/Pb plating; -67°F to 257°F [-55°C to 125°C] for Au plating
- **CONTACT CURRENT RATING:** 2 amps
- **CONTACT RESISTANCE:** 10 MΩ max.
- **BREAKDOWN VOLTAGE:** 1000VAC min.
- **AVERAGE RETENTION FORCE (when closed):** 110g/Pb, based on 0.010 [0.25] dia. test lead
- **ACCEPTS LEADS:** 0.008-0.014 [0.20-0.36] thick leads, 0.075-0.200 [1.91-5.08] long

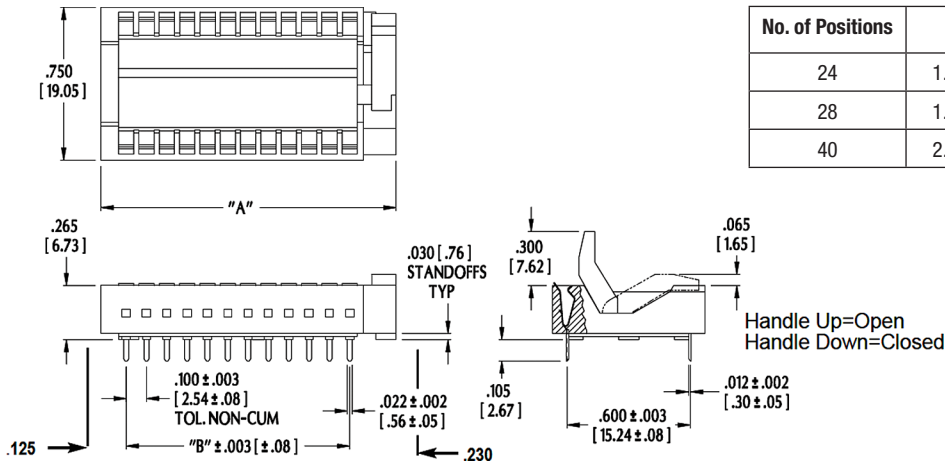
ORDERING INFORMATION

XX-526-1 XXX



MOUNTING CONSIDERATIONS

- **SUGGESTED PCB HOLE SIZE:** 0.035 ±0.002 [0.89 ±0.05] dia.



No. of Positions	Dim. "A"	Dim. "B"
24	1.450 [36.83]	1.100 [27.94]
28	1.650 [41.90]	1.300 [33.02]
40	2.250 [57.15]	1.900 [48.26]

ALL DIMENSIONS: INCHES [MILLIMETERS]
 ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED
 FOR SERIES 516 STANDARD ZIF SOCKET, SEE DATA SHEET 10017
 CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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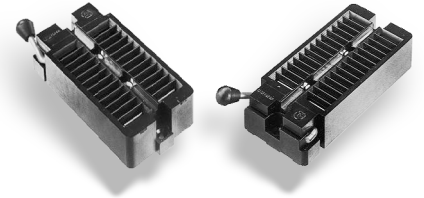
10018
 Rev. 2.2
 1 of 1



Series 57 Quick-Release Universal Zero-Insertion-Force DIP Test Socket

FEATURES

- Accepts Devices on 0.300 to 0.600 [7.62 to 15.24] Centers
- All Pin Count Sockets go into PCB with either 0.300 or 0.600 [7.62 or 15.24] Centers
- Quick-release Handle Swings Down to Open Contacts for Device Insertion; Releasing Handle Automatically Returns to Close onto Device Leads
- Handle Mounted on either Right- or Left-hand Side
- Solder into PCBs or Plugged into Any Socket



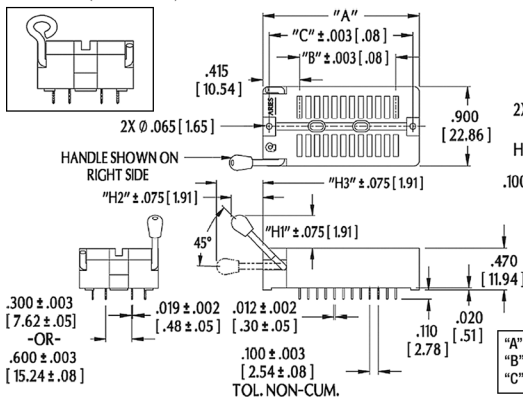
GENERAL SPECIFICATIONS

- **STANDARD SOCKET BODY:** Black UL 94V-0 Glass-filled Polyphenylene Sulfide (PPS)
- **HIGH-TEMP SOCKET BODY:** natural color Polyetheretherketone (PEEK)
- **HANDLE:** Stainless Steel
- **HANDLE KNOB:** Brass 360, 1/2-hard (no Knob on Loop handle)
- **CONTACT MATERIAL:** BeCu 172 per QQ-C-553; Spinodal; BeNi 360, 1/2-hard
- **ALL BeCu CONTACTS:** 50µ [1.27µ] min. Ni under plate per QQ-N-290, over plated with 200µ [5.08µ] min. matte Sn per ASTM B545-97; -OR- 200µ [5.08µ] min. 90/10 Sn/Pb per MIL-T-10727-11 10µ [0.25µ] min. Au per MIL-G-45204
- **SPINODAL CONTACT PLATING:** 50µ [1.27µ] min. NiB
- **HIGH-TEMPERATURE BeNi CONTACT PLATING:** 50µ [1.27µ] NiB
- **CONTACT CURRENT RATING:** 1 amp
- **INSULATION RESISTANCE:** 1000 MΩ min.
- **DIELECTRIC WITHSTANDING VOLTAGE:** 1000 VAC
- **LIFE CYCLE:** 25,000 to 50,000 cycles
- **OPERATING TEMPERATURE:** min. -67°F [-55°C]; max. 221°F [105°C] for Sn plating, 302°F [150°C] for Au plating, 392°F [200°C] for NiB plating, 482°F [250°C] for high-temp socket
- **RETENTION FORCE (closed):** 55g/pin based on a 0.020 [0.51] dia. test lead
- **ACCEPTS LEADS:** 0.015-0.035 [0.38-0.89] wide, 0.110-0.280 [2.79-7.11] long

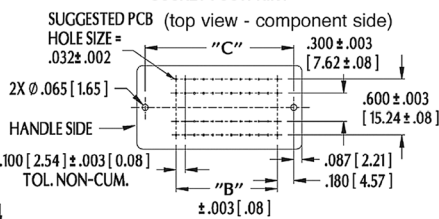
MOUNTING CONSIDERATIONS

- See **SOCKET FOOTPRINT** below

LOOP HANDLE (shown left side)



SOCKET FOOTPRINT



"A" = (NO. OF PINS PER ROW x 0.100 [2.54]) + 0.590 [14.99]
 "B" = (NO. OF PINS PER ROW - 1) x 0.100 [2.54]
 "C" = (NO. OF PINS PER ROW x 0.100 [2.54]) + 0.415 [10.54]

ORDERING INFORMATION

XX-X 57 X-X X

Plating

- 0 = Sn over Ni
- 0TL = Sn/Pb over Ni
- 1 = Au over Ni
- 6 = NiB (Spinodal)
- 8 = Hi-temp Socket

Termination

- 1 = Solder Pin Tail

45° Handle Options

- 0 = Long Handle, Right Side
- 1 = Long Handle, Left Side
- 2 = Short Handle, Right Side
- 3 = Short Handle, Left Side
- 4 = Loop Handle, Right Side *
- 5 = Loop Handle, Left Side *

Series

- Row-to-Row Spacing (btm)
- 3 = 0.300 [7.62]
- 6 = 0.600 [15.24] (Std)

Pins

- 24, 28, 32, 36, 40, 42, 44, 48

* Hi-Temp Socket Only

Handle	Dim "H1"	Dim. "H2"	Dim "H3"
Long w/ Knob	0.568 [14.43]	0.300 [7.62]	0.471 [11.96]
Short w/ Knob	0.317 [8.05]	0.400 [10.16]	0.252 [6.40]
Loop (no Knob)	0.270 [6.86]	0.193 [4.90]	0.405 [10.29]

ALL DIMENSIONS: INCHES [MILLIMETERS]

ALL TOLERANCES: ±0.005 [0.13] UNLESS OTHERWISE SPECIFIED

FITS TEST SOCKET RECEPTACLE XX-6556-XX, SEE [DATA SHEET 10003](#)

CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS

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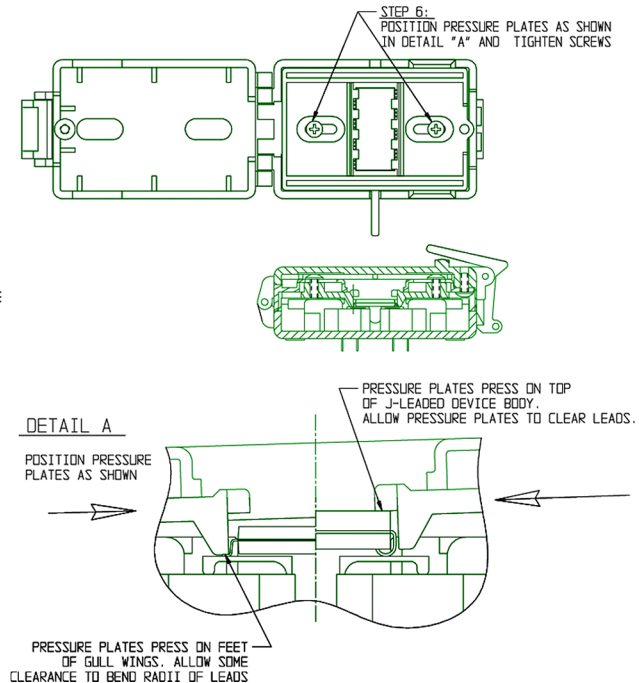
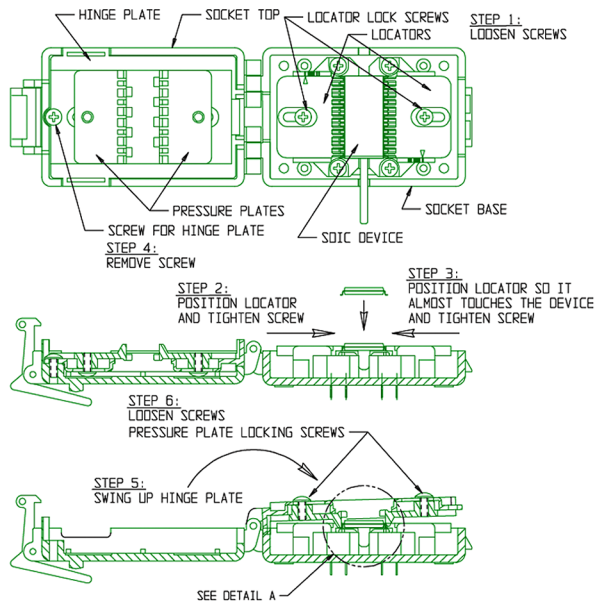
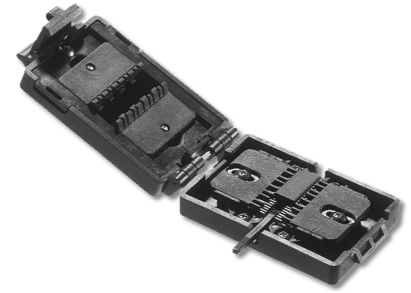
10019
 Rev. 1.5
 1 of 1



Setup Instructions for Universal SOIC Socket

SOCKET SETUP

1. Loosen locator lock screws
2. Slide one of the locators to a position that would place the device to be tested centrally on the contacts and tighten its lock screw
3. Slide the second locator lock screw (clearance is required for ease-of-loading and removal)
4. Remove screw for hinge plate
5. Swing hinge plate up out of socket top
6. Loosen pressure plate locking screws and slide them out
7. Position pressure plates so they will press down on the feet (part of lead that gets soldered to board) of a gull wing device (see Detail "A"). If the device has J-leads, position pressure plates to press down on top of device's body (see Detail "B") and tighten locking screws.
8. Swing hinge plate back into the socket top and tighten the screw for the hinge plate
9. Double check your settings



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Rev. 1.2
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