

# MAXIMUM SOLUTIONS

## New Crimp Pins and Receptacles from Mill-Max

*A selection of wire termination products for a range of applications*

Mill-Max is pleased to announce the addition of new crimp pins and receptacles to our selection of wire termination products. These pins and receptacles are precision-machined to exacting tolerances and gold plated for excellent conductivity and durability. The receptacles are fitted with the high reliability Mill-Max spring finger contacts. If your application requires dependable, long lasting crimp wire connections, then these pins and receptacles will fit the bill perfectly.

There are two new pins, and five new receptacles to choose from. The table below provides details of the pin size, wire accommodation size and Mill-Max part numbers. The Mill-Max part numbers in the table specify 10 micro inches gold plating on the shell and 30 micro inches gold plating on the internal contacts. Thicker gold plating options are available upon request. All plating options have a nickel under-plate.



Mill-Max Part # (Male Pins)	Wire Accommodation	Pin Size
4609-0-07-15-00-00-03-0	18- 20 AWG	.054" (1,37 mm)
6618-0-07-15-00-00-03-0	16- 20 AWG	.078" (1,98 mm)

Mill-Max Part # (Receptacles)	Wire Accommodation	Pin Acceptance Range
3735-0-19-15-34-27-10-0	18- 22 AWG	Between .032"-.046" (0,813-1,168mm)
6433-0-19-15-42-27-10-0	18- 22 AWG	Between .059"-.063" (1,499-1,600mm)
5124-0-19-15-34-27-10-0	20- 24 AWG	Between .032"-.046" (0,813-1,168mm)
5135-0-19-15-16-27-10-0	20- 24 AWG	Between .022"-.034" (0,559-0,864mm)
5448-0-33-15-16-27-10-0	20- 24 AWG	Between .022"-.034" (0,559-0,864mm)

These crimp pins and receptacles may be used to terminate discrete wires, such as in board-to-board or intra-board connections for power or signal. They are also ideal for use in cable assembly connectors in which they can be insert molded or potted around. With a broad acceptance range of wire sizes (16-24 AWG) and mating leads (.022" - .063"), this new group of diverse crimp termination products offers flexible solutions for a variety of applications.

For more information, please visit [www.mill-max.com/PR696](http://www.mill-max.com/PR696).

# MALE PCB PINS

## PRINTED CIRCUIT PINS

<p><b>1959-0</b> 1959-0-00-15-00-00-03-0 Flat face Target contact, surface mount Press-fit in .098 mounting hole</p>	<p><b>1959-1</b> 1959-1-00-15-00-00-03-0 Concave face Target contact, surface mount Press-fit in .098 mounting hole</p>	<p><b>1969-0</b> 1969-0-00-15-00-00-03-0 Flat face Target contact, solder Tail Press-fit in .098 mounting hole</p>	<p><b>1969-1</b> 1969-1-00-15-00-00-03-0 Concave face Target contact, solder Tail Press-fit in .098 mounting hole</p>						
<p><b>1968-0</b> 1968-0-01-15-00-00-03-0 Flat face Target contact, Press-fit in .097" mounting hole. For wire sizes up to 16AWG</p>	<p><b>1968-1</b> 1968-1-01-15-00-00-03-0 Concave face Target contact, Press-fit in .097" mounting hole. For wire sizes up to 16AWG</p>	<p><b>3078</b> 3078-X-00-15-00-00-03-0 Press-fit in .057 mounting hole For wire sizes up to 22 AWG</p> <table border="1" data-bbox="1218 924 1429 1092"> <thead> <tr> <th>Basic Part Number</th> <th>Pin Length A</th> </tr> </thead> <tbody> <tr> <td>3078-0</td> <td>.145</td> </tr> <tr> <td>3078-3</td> <td>.205</td> </tr> </tbody> </table>		Basic Part Number	Pin Length A	3078-0	.145	3078-3	.205
Basic Part Number	Pin Length A								
3078-0	.145								
3078-3	.205								
<p><b>3180</b> 3180-2-01-XX-00-00-03-0 Press-fit in .055 mounting hole For wire sizes up to 22 AWG</p>	<p><b>0518</b> 0518-0-01-XX-00-00-03-0 Press-fit in .059 mounting hole For wire sizes up to 22 AWG</p>	<p><b>4609</b> 4609-0-07-XX-00-00-03-0 Wire crimp termination. Accepts wire sizes 18 AWG Max. / 20 AWG Min.</p>	<p><b>6618</b> 6618-0-07-XX-00-00-03-0 Wire crimp termination. Accepts wire sizes 16 AWG Max. / 20 AWG Min.</p>						

### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm .005$   
Diameters:  $\pm .002$   
Angles:  $\pm 2^\circ$



ORDER CODE: XXXX - 0 - 00 - XX - 00 - 00 - 03 - 0

BASIC PART #

SPECIFY PIN FINISH:

- 01 200  $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 200  $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 10  $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 20  $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 50  $\mu$ m GOLD OVER NICKEL (RoHS)



# PIN RECEPTACLES

FOR .022" - .034" DIAMETER PINS AND .025" SQUARE PINS

<p><b>9808</b> 9808-0-15-XX-16-XX-04-0 Press-fit in .067 mounting hole</p>	<p><b>9101</b> 9101-0-15-XX-16-XX-10-0 Press-fit in .067 mounting hole</p>	<p><b>5650</b> 5650-0-19-XX-16-XX-10-0 Press-fit in .067 mounting hole</p>	<p><b>8679</b> 8679-0-15-XX-16-XX-10-0 Solder mount in .071 min. mounting hole Also available on 24mm wide carrier tape: 800 parts per 13" reel See page 194.11 for Tape &amp; Reel details</p>						
<p><b>6021</b> 6021-0-15-XX-16-XX-10-0 Solder mount in .062 min. mounting hole Also available on 24mm wide carrier tape: 1,500 parts per 13" reel See page 194.11 for Tape &amp; Reel details</p>	<p><b>1873</b> 1873-0-15-XX-16-XX-04-0 Press-fit in .066 mounting hole</p>	<p><b>8827</b> 8827-0-15-XX-16-XX-04-0 Press-fit in .061 mounting hole</p>	<p><b>5070</b> 5070-0-18-XX-16-XX-10-0 Press-fit in .061 mounting hole</p>						
<p><b>7620</b> 7620-0-34-XX-16-XX-10-0 Double Ended Receptacle. See chart for Contact number &amp; acceptance ranges</p>	<table border="1"> <thead> <tr> <th>Contact Number</th> <th>Acceptance Range</th> </tr> </thead> <tbody> <tr> <td>(a) #16</td> <td>.022 - .034 and .025 □</td> </tr> <tr> <td>(b) #34</td> <td>.032 - .046</td> </tr> </tbody> </table> <p>(Data on Page 258)</p>	Contact Number	Acceptance Range	(a) #16	.022 - .034 and .025 □	(b) #34	.032 - .046	<p><b>5135</b> 5135-0-19-XX-16-XX-10-0 Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.</p>	<p><b>5448</b> 5448-0-33-XX-16-XX-10-0 Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.</p>
Contact Number	Acceptance Range								
(a) #16	.022 - .034 and .025 □								
(b) #34	.032 - .046								

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Dimensions:** Inches  
**Tolerances On:** Lengths: ±.005  
 Diameters: ±.002  
 Angles: ± 2°



ORDER CODE: **XXXX - X - XX - XX - 16 - XX - 10 - 0**

BASIC PART #

SPECIFY SHELL FINISH:

- 01 200 μ" TIN/LEAD OVER NICKEL
- ◆ 80 200 μ" TIN OVER NICKEL (RoHS)
- ◆ 15 10 μ" GOLD OVER NICKEL (RoHS)

SPECIFY CONTACT FINISH:

- 01 200 μ" TIN/LEAD OVER NICKEL
- ◆ 80 200 μ" TIN OVER NICKEL (RoHS)
- ◆ 27 30 μ" GOLD OVER NICKEL (RoHS)

SELECT CONTACT:

**#16 CONTACT (DATA ON PAGE 256)**

(For alternate contact choices, see group D on page 248)



# PIN RECEPTACLES

FOR .032" - .046" DIAMETER PINS

<p><b>0739</b> 0739-0-15-XX-34-XX-10-0 Hex press-fit in .078 plated through-hole</p>	<p><b>8853</b> 8853-0-15-XX-34-XX-10-0 Press-fit in .071 mounting hole</p>	<p><b>8838</b> 8838-0-15-XX-34-XX-10-0 Solder mount in .086 min. mounting hole</p>	<p><b>3100</b> 3100-0-15-XX-34-XX-10-0 Solder mount in .074 min. mounting hole</p>
<p><b>4130</b> 4130-0-33-XX-34-XX-10-0 Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.</p>	<p><b>0720</b> 0720-0-33-XX-34-XX-10-0 Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.</p>	<p><b>5124</b> 5124-0-19-XX-34-XX-10-0 Wire crimp termination. Accepts wire sizes 20 AWG Max. / 24 AWG Min.</p>	<p><b>3735</b> 3735-0-19-XX-34-XX-10-0 Wire crimp termination. Accepts wire sizes 18 AWG Max. / 22 AWG Min.</p>
<p><b>0740</b> 0740-0-18-XX-34-XX-10-0 Press-fit in .075 mounting hole For wire sizes up to 20 AWG</p>	<p><b>5084</b> 5084-0-18-XX-34-XX-10-0 Press-fit in .081 mounting hole For wire sizes up to 18 AWG</p>	<p><b>8731</b> 8731-0-19-XX-34-XX-10-0 Wire crimp termination. Accepts wire sizes 22 AWG Max. / 26 AWG Min.</p>	

## SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths: ±.005

Diameters: ±.002

Angles: ± 2°



**ORDER CODE:** XXXX - X - XX - XX - 34 - XX - XX - 0

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 200 μ" TIN/LEAD OVER NICKEL
- ◆ 80 200 μ" TIN OVER NICKEL (RoHS)
- ◆ 15 10 μ" GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 200 μ" TIN/LEAD OVER NICKEL
- ◆ 80 200 μ" TIN OVER NICKEL (RoHS)
- ◆ 27 30 μ" GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#34 CONTACT (DATA ON PAGE 258)**

(For alternate contact choices, see group E on page 248)



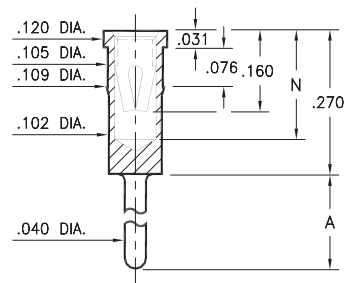
# PIN RECEPTACLES

**FOR .040" - .060" DIAMETER PINS (#03 CONTACT)**  
**FOR .059" - .063" DIAMETER PINS (#42 CONTACT)**

## 0433/8433

**X433-0-15-XX-03-XX-04-0**

Press-fit in .106 mounting hole

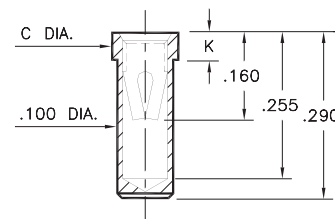


Basic Part Number	Length A	Depth N
<b>0433-0</b>	.120	.205
<b>8433-0</b>	.315	.230

## 0435/0436

**043X-0-15-XX-03-XX-10-0**

Solder mount in .102 min. mounting hole  
 Also available on 24mm wide carrier tape:  
 950 parts per 13" reel  
 See page 194.17 for Tape & Reel details

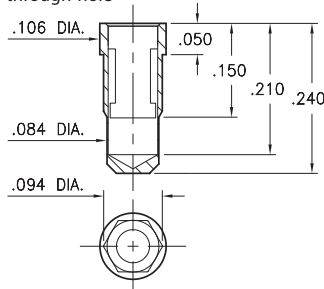


Basic Part Number	Dia. C	Length K
<b>0435-0</b>	.118	.050
<b>0436-0</b>	.125	.070

## 0342

**0342-0-15-XX-42-XX-10-0**

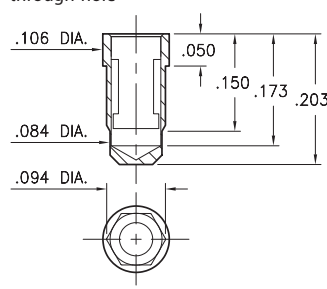
Hex press-fit in .090±.002 plated through-hole



## 6342

**6342-0-15-XX-42-XX-10-0**

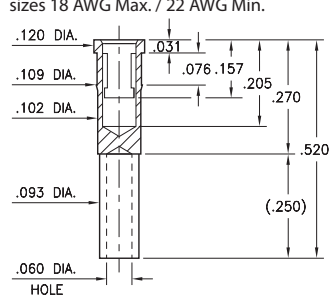
Hex press-fit in .090±.002 plated through-hole



## 6433

**6433-0-19-XX-42-XX-10-0**

Press-fit in .106 mounting hole  
 Wire crimp termination. Accepts wire sizes 18 AWG Max. / 22 AWG Min.



### Mechanical Data #42 Contact:

Insertion/Extraction Force with a Ø.061 (nominal) pin:

First Cycle		2nd & Subsequent Cycles	
Insertion Force	Extraction Force	Insertion Force	Extraction Force
20N	6N	10N	6N

Compliance Test (the "spring back" characteristic of the contact to accept Ø.059 small pin after insertion of a Ø.063 large pin) :

Initial Cycle with Ø.059 pin		Second Cycle with Ø.063 pin		Third Cycle with Ø.059 pin	
Ins. Force	Ext. Force	Ins. Force	Ext. Force	Ins. Force	Ext. Force
18N	6N	22N	7N	3N	2N

(Insertion/Extraction Forces are in Newtons and measured with polished steel gage pins having elliptical shaped tips).

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard

**Contact Material:** Beryllium Copper Alloy 172, HT

**Dimensions:** Inches

**Tolerances On:** Lengths: ±.005

Diameters: ±.002

Angles: ± 2°



**ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0**

**BASIC PART #**

**SPECIFY SHELL FINISH:**

- 01 200 μ" TIN/LEAD OVER NICKEL
- ◆ 80 200 μ" TIN OVER NICKEL (RoHS)
- ◆ 15 10 μ" GOLD OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 01 200 μ" TIN/LEAD OVER NICKEL
- ◆ 80 200 μ" TIN OVER NICKEL (RoHS)
- ◆ 27 30 μ" GOLD OVER NICKEL (RoHS)

**SELECT CONTACT:**

**#03 or #42 CONTACT (DATA ON PAGE 259)**

