

# MAXIMUM SOLUTIONS

## Mill-Max Expands its Line of Receptacles with Organic Fibre Plug® Solder Barrier -- 14 Styles Offered, Tape & Reel Packaged

Mill-Max's organic fibre plug (OFP®) solder barrier receptacles are discrete sockets for through-hole soldering into printed circuit boards. These open bottom receptacles are fitted with organic fibre plugs to prevent solder, paste or flux from contaminating the internal contact during the placing and soldering process. When the device/mating lead is plugged into the receptacle the OFP® is knocked out allowing the mating lead to pass through the fingers of the internal contact and make a reliable electrical connection.



14 sizes/styles are now available, 13 have standard tape & reel packaging. The advantage of tape & reel packaging for these receptacles is it permits through-hole components to be placed simultaneously with surface mount parts on pick-'n-place assembly lines – eliminating the need to hand place the receptacles in an additional manufacturing step. The OFP® barrier permits the sockets to be vacuum picked from the tape prior to placement in a hole in the circuit board.

The knock-out-bottom feature enables these sockets to be made relatively short compared to many similar receptacles. The reduced length provides two advantages: the receptacles can stand upright and stable in a carrier tape pocket and the protrusion through the PCB is minimal — especially important when working with SMT boards. The open bottom receptacle design eliminates the need to trim long device leads that would otherwise bottom out in a closed receptacle design and also makes them ideal for low profile board stacking applications via the ability to pass through.

The OFP® parts are available as discrete receptacles and can be supplied in bulk or on carrier tape per EIA-481 for industry standard pick and place machines. All Mill-Max receptacles use a precision-machined brass housing with a press-fit beryllium copper “multi-finger” contact.

(Intrusive reflow (also called “pin-in-paste”) is a technique of using conventional through-hole components in a reflow soldering process. The receptacles are placed into plated-through holes (PTH) in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the PTH and achieve solder joints as reliable as wave soldering. The OFP® barrier prevents solder paste from being picked-up inside the contact during pick 'n place assembly. “Overprinting” paste on the solder mask can be used to adjust the volume of paste required to fill each hole.)

Visit [www.mill-max.com/PR626](http://www.mill-max.com/PR626) for more information.

(6/14-- 626)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, Oyster Bay, NY 11771  
516-922-6000 • Fax: 516-922-9253 • [www.mill-max.com](http://www.mill-max.com)



# PIN RECEPTACLES

## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 250, 251 & 253)

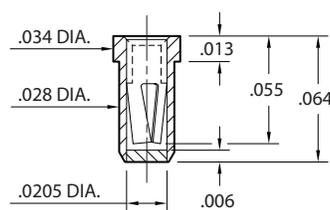
- These through-hole (tubular) receptacles are designed for hand, wave or reflow\* soldering. The ORGANIC FIBRE PLUG® barrier prevents solder paste or flux from contaminating the spring contact.
- After soldering, the OFP® barrier is pushed out of the receptacle when the device is plugged in.
- All parts are available as discrete receptacles or supplied on carrier tape per EIA-481 to feed industry standard pick and place machines.

\*Intrusive reflow (also called "pin-in-paste") is a technique of using conventional through-hole components in a reflow soldering process. The receptacles are placed into plated through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. Solder will fill the plated through-holes and achieve solder joints as reliable as wave soldering. The OFP® barrier prevents solder paste from being picked-up inside the contact during pick 'n place assembly. "Overprinting" paste on the solder mask can be used to adjust the volume of paste required to fill each hole.



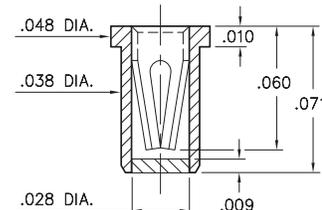
### 4428

**4428-0-XX-XX-04-XX-10-0**  
Solder mount in  $\varnothing .032$ " max. PTH  
#04 Contact for  $\varnothing .008$ " -  $.013$ " pins  
Also available on 16mm wide carrier tape:  
3,400 parts per 13" reel



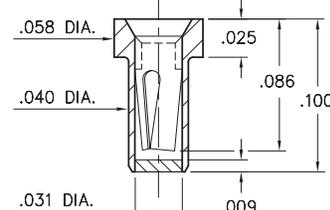
### 5359

**5359-0-XX-XX-10-XX-10-0**  
Solder mount in  $\varnothing .043 \pm .003$ " PTH  
#10 Contact for  $\varnothing .012$ " -  $.017$ " pins  
Also available on 16mm wide carrier tape:  
3,000 parts per 13" reel



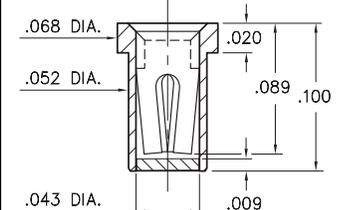
### 0577

**0577-0-XX-XX-21-XX-10-0**  
Solder mount in  $\varnothing .045 \pm .003$ " PTH  
#21 Contact for  $\varnothing .015$ " -  $.022$ " pins  
Also available on 12mm wide carrier tape:  
3,000 parts per 13" reel



### 4015

**4015-0-XX-XX-30-XX-10-0**  
Solder mount in  $\varnothing .057 \pm .003$ " PTH  
#30 Contact for  $\varnothing .015$ " -  $.025$ " pins  
Also available on 8mm wide carrier tape:  
5,500 parts per 13" reel



#### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions: Inches**  
**Tolerances On:** Lengths:  $\pm .005$   
Diameters:  $\pm .002$   
Angles:  $\pm 2^\circ$



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

**BASIC PART #**

**SPECIFY PACKAGING:**

- 43 Discrete Receptacles
- 67 Supplied on 13" Reels

**SPECIFY SHELL FINISH:**

- 01 200  $\mu$ " TIN/LEAD OVER NICKEL
- 80 200  $\mu$ " TIN OVER NICKEL (RoHS)

**SPECIFY CONTACT FINISH:**

- 27 30  $\mu$ " GOLD OVER NICKEL (RoHS)
- 02 100  $\mu$ " TIN/LEAD OVER NICKEL
- 84 200  $\mu$ " TIN OVER NICKEL (RoHS)

**CONTACT:**

#04, #10, #21 or #30 CONTACT (DATA ON PAGES 250, 251 & 253)



# PIN RECEPTACLES

## PIN RECEPTACLES WITH ORGANIC FIBRE PLUG® SOLDER BARRIER (SEE SPECIFIC CONTACT RANGE ON PAGES 254 - 262)

<p><b>0337</b> <b>0337-0-XX-XX-15-XX-10-0</b> Solder mount in <math>\varnothing .066" \pm .003"</math> PTH #15 Contact for <math>\varnothing .020" - .032"</math> pins Also available on 8mm wide carrier tape: 6,000 parts per 13" reel</p>	<p><b>4280</b> <b>4280-0-XX-XX-16-XX-10-0</b> Solder mount in <math>\varnothing .067" \pm .003"</math> PTH #16 Contact for <math>\varnothing .022" - .034"</math> pins Also available on 8mm wide carrier tape: 6,000 parts per 13" reel</p>	<p><b>5280</b> <b>5280-0-XX-XX-16-XX-40-0</b> Solder mount in <math>\varnothing .067" \pm .003"</math> PTH #16 Contact for <math>\varnothing .022" - .034"</math> pins Also available on 16mm wide carrier tape: 2,200 parts per 13" reel</p>	<p><b>0332</b> <b>0332-0-XX-XX-18-XX-10-0</b> Solder mount in <math>\varnothing .079" \pm .003"</math> PTH #18 Contact for <math>\varnothing .037" - .043"</math> pins Also available on 16mm wide carrier tape: 2,200 parts per 13" reel</p>
<p><b>0479</b> <b>0479-0-XX-XX-34-XX-10-0</b> Solder mount in <math>\varnothing .077" \pm .003"</math> PTH #34 Contact for <math>\varnothing .032" - .046"</math> pins Also available on 16mm wide carrier tape: 2,200 parts per 13" reel</p>	<p><b>0375</b> <b>0375-0-XX-XX-02-XX-10-0</b> Solder mount in <math>\varnothing .087" \pm .003"</math> PTH #02 Contact for <math>\varnothing .040" - .050"</math> pins Also available on 12mm wide carrier tape: 4,500 parts per 13" reel</p>	<p><b>0353</b> <b>0353-0-XX-XX-03-XX-10-0</b> Solder mount in <math>\varnothing .106" \pm .003"</math> PTH #03 Contact for <math>\varnothing .040" - .060"</math> pins Also available on 12mm wide carrier tape: 1,300 parts per 13" reel</p>	<p><b>0384</b> <b>0384-0-XX-XX-23-XX-10-0</b> Solder mount in <math>\varnothing .105" \pm .003"</math> PTH #23 Contact for <math>\varnothing .045" - .065"</math> pins Also available on 12mm wide carrier tape: 2,000 parts per 13" reel</p>
<p><b>0376</b> <b>0376-0-XX-XX-07-XX-10-0</b> Solder mount in <math>\varnothing .133" \pm .003"</math> PTH #07 Contact for <math>\varnothing .065" - .082"</math> pins Also available on 16mm wide carrier tape: 1,500 parts per 13" reel</p>	<p><b>0321</b> <b>0321-0-XX-XX-08-XX-10-0</b> Solder mount in <math>\varnothing .144" \pm .003"</math> PTH #08 Contact for <math>\varnothing .084" - .102"</math> pins Also available on 16mm wide carrier tape: 1,700 parts per 13" reel</p>	<p><b>3435</b> <b>3435-0-XX-XX-47-XX-04-0</b> Solder mount in <math>\varnothing .046" \pm .003"</math> PTH #47 Contact for <math>\varnothing .025" - .036"</math> and .025" square pins</p>	

### SPECIFICATIONS:

**Shell Material:** Brass Alloy 360, 1/2 Hard  
**Contact Material:** Beryllium Copper Alloy 172, HT  
**Solder Barrier:** Organic Fibre Plug®  
**Dimensions:** Inches  
**Tolerances On:** Lengths:  $\pm .005$   
 Diameters:  $\pm .002$   
 Angles:  $\pm 2^\circ$



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

### BASIC PART #

**SPECIFY PACKAGING:**

- 43 Discrete Receptacles
- 67 Supplied on 13" Reels

**SPECIFY SHELL FINISH:**

- 01 200  $\mu$ m TIN/LEAD OVER NICKEL
- 80 200  $\mu$ m TIN OVER NICKEL (RoHS)

**CONTACT:**

#02, #07, #08, #15, #16, #18, #23, #34 or #47 CONTACT (DATA ON PAGES 254 - 262)

**SPECIFY CONTACT FINISH:**

- 27 30  $\mu$ m GOLD OVER NICKEL (RoHS)
- 02 100  $\mu$ m TIN/LEAD OVER NICKEL
- 84 200  $\mu$ m TIN OVER NICKEL (RoHS)

