

# MAX solutions

## Receptacles on Tape for Automated Assembly



Mill-Max offers receptacles (discrete sockets) on carrier tape per EIA-481 to feed automated 'pick & place' assembly equipment. Our standard reel size has been 13", but now for 8 & 12mm wide carrier tapes, we also offer the new 7" 'mini' reel. A 7" reel holds about one quarter the parts of a 13" reel. This is more economic and convenient for smaller volume customers who want the benefit of automated assembly.

- Two types of receptacles are available on carrier tape: surface mount, flat types, which sit on the surface of the PCB where the pin or component lead plugs-in parallel to the PCB; and thru-hole types where the lead plugs-in perpendicular to the PCB. Thru-hole receptacles are intrusive reflow soldered\*.

Our increasingly popular thru-hole (tubular) receptacles have an Organic Fibre Plug® barrier which 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.

- Also new for Mill-Max is the availability of RoHS "lead free" plating options. Instead of traditional tin/lead plating on the receptacle's shell and contact, a pure matte tin with oxide and whisker inhibitors can be specified.

*\*Intrusive reflow (also called "pin-in-paste") is a technique of using conventional thru-hole components in a reflow soldering process. The receptacles are placed into plated-thru-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-thru-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.*

(02/06-558)

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<h3>3907</h3> <p><b>3907-0-5X-XX-30-XX-10-0</b> Surface Mount. #30 Contact for Ø.015-.025 pins. Supplied on 12mm wide carrier tape, 4,000 per 13" reel, 1,000 per 7" reel.</p>	<h3>8806</h3> <p><b>8806-0-5X-XX-47-XX-40-0</b> Surface Mount. #47 Contact for Ø.025-.037 pins. Supplied on 12mm wide carrier tape, 4,000 per 13" reel, 1,000 per 7" reel.</p>	<h3>6628</h3> <p><b>6628-0-5X-XX-18-XX-10-0</b> Surface Mount. #18 Contact for Ø.037-.043 pins. Supplied on 12mm wide carrier tape, 3,700 per 13" reel, 900 per 7" reel.</p>
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<h3>9184</h3> <p><b>9184-0-5X-XX-02-XX-40-0</b> Bottom entry, "intrusive" reflow soldered in Ø.095±.003 PTH. #02 Contact for Ø.040-.050 pins. Supplied on 12mm wide carrier tape, 1,500 per 13" reel, 350 per 7" reel.</p>	<h3>9222</h3> <p><b>9222-2-5X-XX-02-XX-40-0</b> Bottom entry, "intrusive" reflow soldered in Ø.085±.003 PTH. #02 Contact for Ø.040-.050 pins. Supplied on 12mm wide carrier tape, 1,500 per 13" reel, 350 per 7" reel.</p>	<p align="center">Carrier tape format for 9184 &amp; 9222</p>	<h3>0577</h3> <p><b>0577-0-6X-XX-21-XX-10-0</b> OFP® thru hole, "intrusive" reflow soldered in Ø.045±.003 PTH. #21 Contact for Ø.015-.022 pins. Supplied on 12mm wide carrier tape, 3,000 per 13" reel, 850 per 7" reel.</p>
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<h3>4015</h3> <p><b>4015-0-6X-XX-30-XX-10-0</b> OFP® thru hole, "intrusive" reflow soldered in Ø.057±.003 PTH. #30 Contact for Ø.015-.025 pins. Supplied on 8mm wide carrier tape, 5,500 per 13" reel, 1,500 per 7" reel.</p>	<h3>4280</h3> <p><b>4280-0-6X-XX-16-XX-10-0</b> OFP® thru hole, "intrusive" reflow soldered in Ø.067±.003 PTH. #16 Contact for Ø.022-.034 pins. Supplied on 8mm wide carrier tape, 5,500 per 13" reel, 1,500 per 7" reel.</p>	<h3>9873</h3> <p><b>9873-0-6X-XX-02-XX-10-0</b> OFP® thru hole, "intrusive" reflow soldered in Ø.083±.003 PTH. #02 Contact for Ø.040-.050 pins. Supplied on 12mm wide carrier tape, 4,500 per 13" reel, 1,200 per 7" reel.</p>	<h3>5364</h3> <p><b>5364-0-6X-XX-23-XX-10-0</b> OFP® thru hole, "intrusive" reflow soldered in Ø.103±.003 PTH. #23 Contact for Ø.045-.065 pins. Supplied on 12mm wide carrier tape, 2,000 per 13" reel, 500 per 7" reel.</p>
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<p><b>SPECIFICATIONS</b></p> <p><b>SHELL MATERIAL:</b> Brass Alloy 360, 1/2 Hard</p> <p><b>CONTACT MATERIAL:</b> Beryllium Copper Alloy 172, HT</p> <p><b>DIMENSION IN INCHES TOLERANCES ON:</b> LENGTHS: ±.005 DIAMETERS: ±.002 ANGLES: ± 2°</p>	<p><b>ORDER CODE: XXXX - X - XX - XX - XX - XX - XX - 0</b></p> <p><b>BASIC PART #</b> →</p> <p><b>REEL SIZE: 5 = 7", 7 = 13"</b> →</p> <p><b>SPECIFY SHELL FINISH:</b></p> <p>01 200µ" TIN/LEAD OVER NICKEL 80 200µ" TIN OVER NICKEL</p> <p><b>SPECIFY CONTACT FINISH:</b></p> <p>27 30µ" GOLD OVER NICKEL 01 200µ" TIN/LEAD or 02 100µ" TIN/LEAD OVER NICKEL 80 200µ" TIN or 84 100µ" TIN OVER NICKEL</p> <p align="center"><b>CONTACT TYPE</b> #21, #30, #16, #47, #18, #02, #03 or #23 (DATA ON PAGES 206-214)</p> <p>The <b>ORGANIC FIBRE PLUG® (OFP®)</b> 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.</p>	<p>Use with #21 &amp; #30 Contacts Only</p>
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