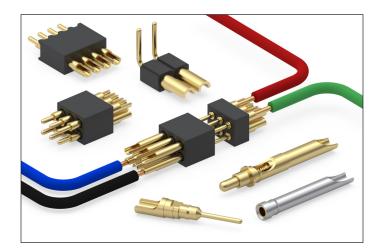
# MAXIMUM SOLUTIONS

#### Mill-Max Solder Cup Connectors and Terminal Pins

A selection of connectors, spring pins, receptacles and terminals offering convenient solutions for a wide range of wire termination applications



Mill-Max is proud to present new solder cup products delivering the most versatile array of solutions for your wire termination needs. Across our product line, there are new options to choose from in connectors and discrete terminals suitable for a variety of spacing, height and orientation requirements.

Solder cup components simplify the task of making wired connections between PCB's or devices and PCB's. They provide an appliance designed to accept and hold wires in place, eliminating the frustration of trying to manipulate them while performing the soldering operation. The solder cup also allows the solder to pool and form around the wire leading to better solder joints and more reliable, robust connections. Mill-Max has developed new manufacturing techniques and equipment to produce solder cup features for 2mm and .050" pitch connectors, right angle and low-profile interconnects and integrated into fine pitch spring loaded connectors.

Mill-Max has long offered a wide range of products with solder cup features including discrete receptacles, terminal pins and spring-loaded pins as well as standard .100" pitch headers, sockets and spring-loaded connectors. We are now expanding this product line by introducing these new solder cup connector configurations: .050" and 2 mm pitch headers with straight and right-angle solder tail options; .050" pitch sockets; .050" pitch sockets; .050" pitch low profile headers.

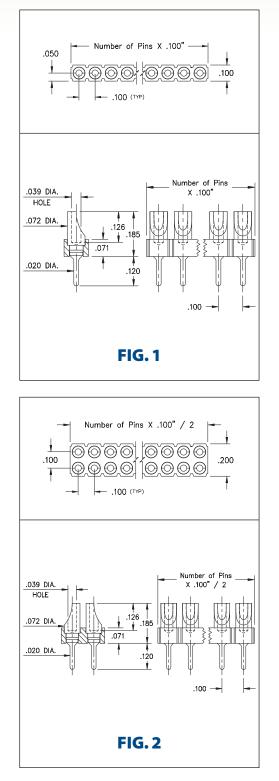
All our solder cup connectors have high temperature insulators and uniformly aligned solder cups to facilitate efficient soldering, some also have enhanced anti-rotation features. Single and double row are available for most series with right angle available only in single row.

For more information, please visit<u>www.mill-max.com/PR691</u>.

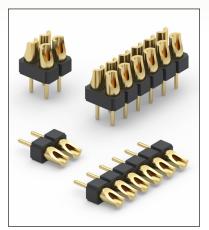
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, Oyster Bay, NY 11771 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

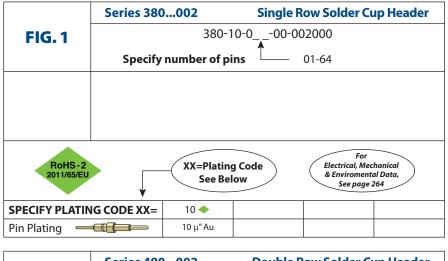


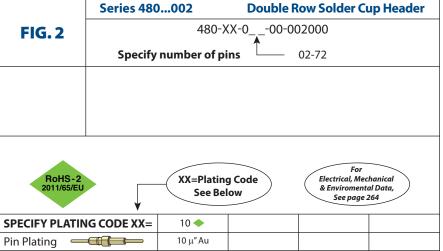
#### SERIES 380 & 480 • .100" GRID LOW PROFILE SOLDER CUP HEADERS SINGLE AND DOUBLE ROW STRIPS



- Series 380 & 480 solder cup headers for low profile wire termination applications
- .020" diameter pins are suitable for mating with standard sockets or for through-hole soldering to the P.C.B.
- Solder cups are uniformly aligned to facilitate efficient soldering
- Accepts up to 22 AWG Stranded wire
- Insulators are high temperature thermoplastic, suitable for all soldering operations

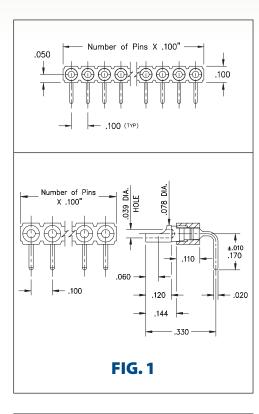




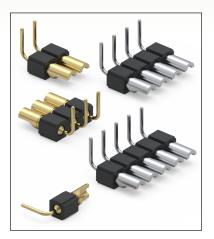




#### SERIES 380 • .100" GRID, LOW PROFILE RIGHT ANGLE SOLDER CUP HEADERS • SINGLE ROW STRIPS



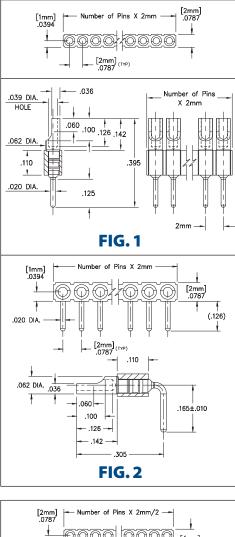
- Series 380 right angle solder cup headers for low profile wire termination applications
- .020" diameter pins are suitable for mating with standard sockets or for through-hole soldering to the P.C.B.
- Connectors feature uniformly aligned solder cups and anti-rotation construction to facilitate efficient soldering
- Accepts up to 22 AWG Stranded wire
- Insulators are high temperature thermoplastic, suitable for all soldering operations

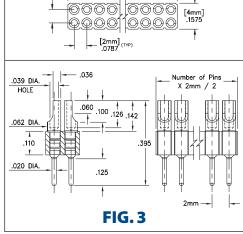


|  | Series 380        | )003         | Single Row R/A Solder Cup Header |           |  |  |  |  |
|--|-------------------|--------------|----------------------------------|-----------|--|--|--|--|
| FIG. 1   | 380-XX-110-003000 |              |                                  |           |  |  |  |  |
|  | Specify           | number of pi | 01-64                            |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
|  |                   |              |                                  |           |  |  |  |  |
| RoHS-2<br>2011/65/EU XX=Plating Code<br>See Below For<br>Electrical, Mechanical<br>& Environmental Data,<br>See page 264 |                   |              |                                  |           |  |  |  |  |
| SPECIFY PLATIN   | IG CODE XX=       | 10 🔶         |                                  | 40 🔶      |  |  |  |  |
| Pin Plating 🛛 📟  |                   | 10 μ″ Au     |                                  | 200 μ″ Sn |  |  |  |  |

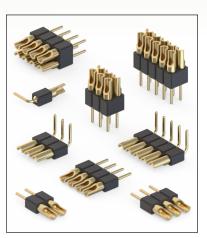


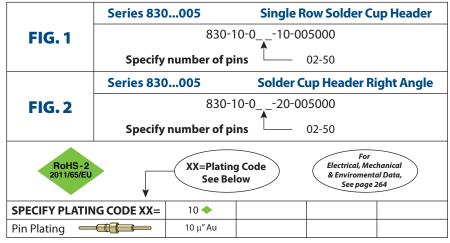
#### SERIES 830 AND 832 • 2mm GRID SOLDER CUP HEADERS, SINGLE ROW RIGHT ANGLE, SINGLE AND DOUBLE ROW STRAIGHT

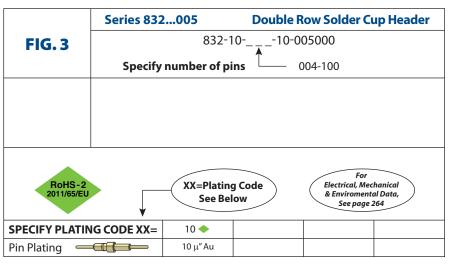




- Series 830 & 832 solder cup headers for 2mm pitch wire termination applications
- .020" diameter pins are suitable for mating with standard sockets or for through-hole soldering to the P.C.B.
- Connectors feature uniformly aligned solder cups & anti-rotation construction to facilitate efficient soldering
- Accepts up to 22 AWG Stranded wire
- Series 830 right angle headers are low profile and minimize wire manipulation for parallel mating conditions
- Insulators are high temperature thermoplastic, suitable for all soldering operations

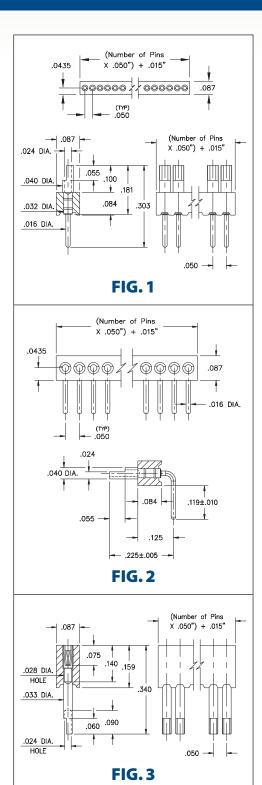




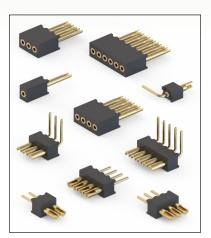


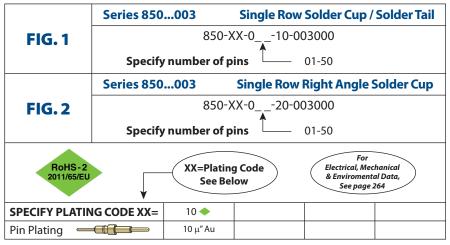


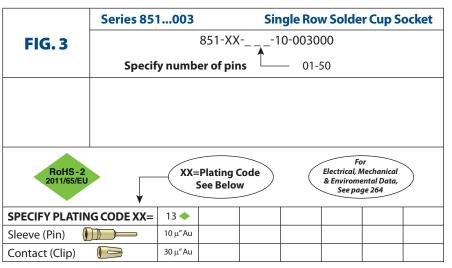
#### SERIES 850 & 851 • .050" GRID SOLDER CUP HEADERS AND SOCKETS • SINGLE ROW STRIPS



- Solder cups are pre-aligned and accept up to 26 AWG wire
- Series 850 headers use MM #3050-0 pins. See page 244 for details
- Series 851 sockets use MM #1157-0 receptacles that accept pin diameters from .015"-.020". See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations

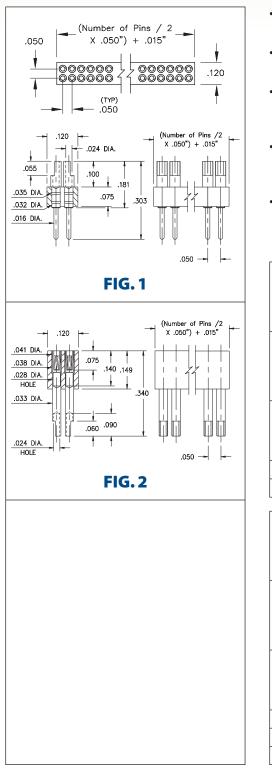




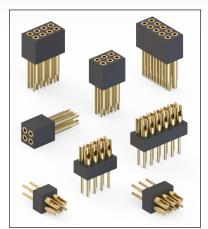


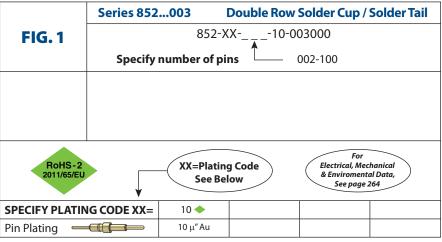


#### SERIES 852 & 853 • .050" GRID SOLDER CUP HEADERS AND SOCKETS, DOUBLE ROW STRIPS



- Solder cups are pre-aligned and accept up to 26 AWG wire
- Series 852 headers use MM #3050-0 pins. See page 244 for details
- Series 853 sockets use MM #1157-0 receptacles that accept pin diameters from .015"-.020". See page 160 for details
- Receptacles use Hi-Rel, 3-finger BeCu #11 contact rated at 3 amps. See page 251 for details
- Insulators are high temperature thermoplastic, suitable for all soldering operations



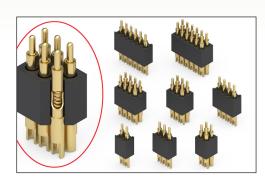


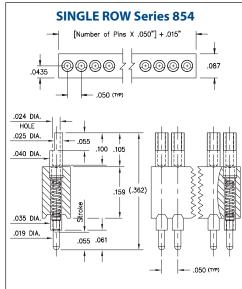
|                        | Series 853003          |          |  | Doub | Double Row Solder Cup Sockets   |  |  |  |  |  |
|------------------------|------------------------|----------|--|------|---|--|--|--|--|--|
| FIG. 2                 | 853-XX10-003000        |          |  |      |   |  |  |  |  |  |
|                        | Specify number of pins |          |  |      | 002-100   |  |  |  |  |  |
|                        |                        |          |  |      |   |  |  |  |  |  |
|                        |                        |          |  |      |   |  |  |  |  |  |
|                        |                        |          |  |      |   |  |  |  |  |  |
| RoHS - 2<br>2011/65/EU |                        |          |  |      | For<br>Electrical, Mechanical<br>& Enviromental Data,<br>See page 264 |  |  |  |  |  |
| SPECIFY PLATIN         | 13 🔶                   |          |  |      |   |  |  |  |  |  |
| Sleeve (Pin)           |                        | 10 µ″ Au |  |      |   |  |  |  |  |  |
| Contact (Clip)         |                        | 30 µ″ Au |  |      |   |  |  |  |  |  |



# **SPRING-LOADED CONNECTORS**

#### SERIES 854 & 855 • .050" GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

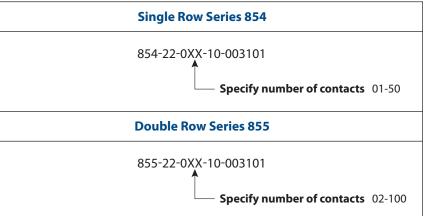




#### **DOUBLE ROW Series 855** [Number of Pins X .050"/2] + .015" $\odot \odot \odot \odot$ $\odot \odot \odot \odot$ .050 .120 $\odot \odot \odot \odot$ $\Theta \Theta \Theta \Theta$ .050 (TYP) .024 DIA HOLE .025 DIA .055 100 .105 .040 DIA .149 (.362) .035 DIA .019 DIA. .055 .061 .050 (TYP)

- Modular contacts for use on .050" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic
- Both 854 & 855 series strips have spring pins with wire termination soldercups. The soldercups are aligned to provide easy access for soldering up to size 26 AWG wires

### **ORDERING INFORMATION**



#### **Technical Specifications**

**Materials:** 

- Contact piston & base: Machined copper alloy plated 20 $\mu^{\prime\prime}$  gold over 100 $\mu^{\prime\prime}$  nickel
  - Spring: Beryllium copper-plated 10µ" gold
  - Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.0275"): 60 grams Durability: Up to 100,000 cycles

#### **Electrical:**

Voltage rating: 100Vrms/150Vdc Current rating: 2A (continous), 3A (peak) per contact Contact resistance:  $20m\Omega$  max. Insulation resistance: 10,000M $\Omega$  min. Dielectric strength: 700Vrms min. Capacitance: 1pF max.

RoHS-2

2011/65/EU

