

MAXIMUM SOLUTIONS

New Spring Loaded Pins with Removable Pick and Place Caps For Automated Assembly



Mill-Max announces a new option for automated assembly of spring-loaded pins with the introduction of removable pick & place caps. The new 806 series features standard Mill-Max spring pins with removable caps which keep parts centered in the carrier tape pocket, present a large round target surface for vacuum pick up and are easily removed after the soldering process.

Some components, particularly individual terminals and pins, are poorly suited for pick & place carrier tape packaging due to their geometry. To solve this problem it's often necessary to add an accessory to the part to accommodate packaging and automated assembly; these removable caps do just that. They are the ideal solution for applications in which the production volume necessitates automatic assembly yet an insulator is not required or feasible. The removable caps attach to the body of the spring pin, slipping over without compressing or damaging the plunger. The four finger design creates compliancy making the cap easy to remove. The closed flat top ensures reliable vacuum pick up every time.

The [806-22-001-30-0XX191](#) series is currently available in nine surface mount options using standard Mill-Max spring pins 0900-X and 0907-X. The [806-22-001-10-00X191](#) series is currently available in four through-hole style spring pins 0906-X (see attached for details). All parts are packaged per EIA-481 standards on 13" reels with the surface mount style on 16 mm wide tape and through-hole on 24 mm wide. The removable caps are made of high temperature nylon 46 and are suitable for most soldering processes

Mill-Max spring pins feature precision-machined external components and high reliability internal springs. Gold-plated components and springs ensure the highest conductivity, corrosion resistance and durability. The spring-loaded pins used mentioned here have a current rating of 2 amps continuous use (3 amps maximum.)

For more information, please visit: www.mill-max.com/PR671.

(2/17 -- PR671)

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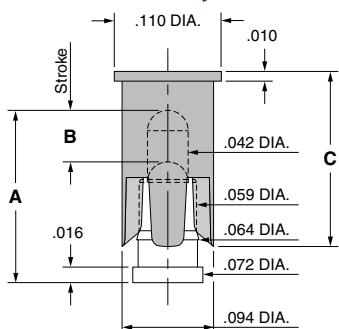


SPRING-LOADED CONNECTORS

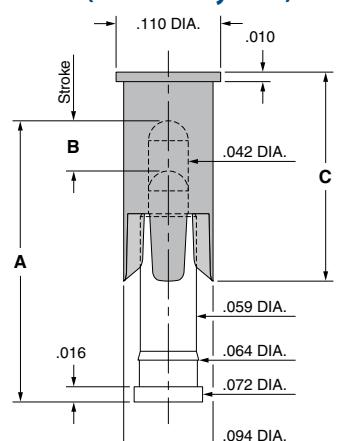
SERIES 806 • REMOVABLE PICK & PLACE CAP, SPRING-LOADED PINS • SURFACE MOUNT



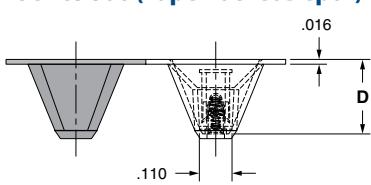
Series 806 (Contact Style 1,2,3,4,10,11)



Series 806 (Contact Style 12,13 & 14)



Series 806 (Tape Pocket Depth)



- Surface mount spring-loaded pins with removable pick & place cap are available in nine heights from .137" to .295" with a working travel of either .0195" or .0275"
- Spring pins used in this series are Mill-Max 0900-X and 0907-X (see page 23 for more details)
- The pick & place cap allows individual spring-loaded contacts to be packaged on tape and reel for automated assembly. The caps are easily removed after soldering leaving only the spring pin on the board.
- Pick & place cap material is high temperature thermoplastic suitable for most SMT soldering processes
- Supplied on 16 mm wide carrier tape, 13" reels; packaging per EIA-481. See below for ordering information

ORDERING INFORMATION

Series 806 (Tape & Reel Packaged)

806-22-001-30-0XX191

Specify contact style 1-4
Specify contact style 10-14

Contact Style	Initial Height (A)	Working Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	.137	.0195	.030-.039	.180	.252	780
2	.155	.0195	.030-.039	.180	.252	780
3	.177	.0275	.050-.055	.180	.252	780
4	.197	.0275	.050-.055	.180	.252	780
10	.217	.0275	.050-.055	.220	.285	750
11	.236	.0275	.050-.055	.220	.285	750
12	.255	.0275	.050-.055	.220	.361	550
13	.275	.0275	.050-.055	.220	.361	550
14	.295	.0275	.050-.055	.220	.361	550

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20 μ " gold over 100 μ " nickel

Spring (Contact style 1-14): Beryllium copper-plated 10 μ " gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A) (Contact style 1-14): 25 grams

Spring force @ mid stroke (B/2) (Contact style 1-14): 60 grams

Durability: Up to 1,000,000 cycles

Electrical:

Current rating: 2A (continuous), 3A (peak) per contact

Contact resistance: 20m Ω max.

Insulation resistance: 10,000M Ω min.



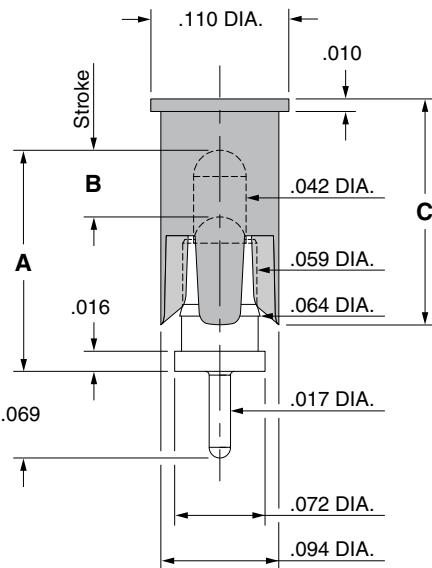
SPRING-LOADED CONNECTORS

SERIES 806 • REMOVABLE PICK & PLACE CAP, SPRING-LOADED PINS • THROUGH-HOLE MOUNT

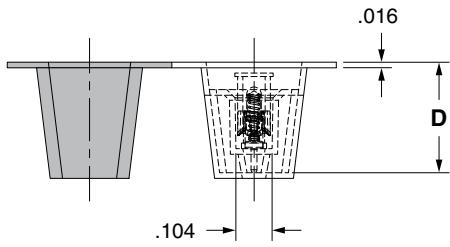


- Through hole mount spring-loaded pins with removable pick & place cap are available in four heights from .137" to .197" with a working travel of either .0195" or .0275"
- Spring pins used in this series are Mill-Max 0906-X (see page 25 for more details)
- The pick & place cap allows individual spring-loaded contacts to be packaged on tape and reel for automated assembly. The caps are easily removed after soldering leaving only the spring pin on the board
- Pick & place cap material is high temperature thermoplastic suitable for most SMT soldering processes
- Supplied on 24 mm wide carrier tape, 13" reels; packaging per EIA-481. See below for ordering information

Series 806 (Contact Style 1-4)



Series 806 (Tape Pocket Depth)



ORDERING INFORMATION

Series 806 (Tape & Reel Packaged)

806-22-001-10-00X191

Specify contact style 1-4

Contact Style	Initial Height (A)	Working Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	.137	.0195	.030-.039	.180	.317	640
2	.155	.0195	.030-.039	.180	.317	640
3	.177	.0275	.050-.055	.180	.317	640
4	.197	.0275	.050-.055	.180	.317	640

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 20 μ " gold over 100 μ " nickel

Spring (Contact style 1-4): Beryllium copper-plated 10 μ " gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A) (Contact style 1-4): 25 grams

Spring force @ mid stroke (B/2) (Contact style 1-4): 60 grams

Durability: Up to 1,000,000 cycles

Electrical:

Current rating: 2A (continuous), 3A (peak) per contact

Contact resistance: 20m Ω max.

Insulation resistance: 10,000M Ω min.



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