## MAXIMUM SOLUTIONS

#### Mill-Max Expands its Line of Discrete Insulated Spring-Loaded Pins



Due to customers' demand, Mill-Max has expanded its line of discrete insulated spring-loaded pins. Our original 807-22-001-30-00X101 series are SMT insulated pins in seven heights from .100" (2,54mm) to .236" (5,99mm) with working travel from .012" (0,3mm) to .0275" (0,7mm). The new SMT pins, 807-22-001-30-01X101 series, are available in ten heights from .255" (6,48mm) to .430" (10,9mm) with a working travel of .0275" (0,7mm). We now also offer new through-hole mount pins, 807-22-001-10-00X101 series, available in six heights from .137" (3,48mm) to .236" (5,99mm) with a working travel of .0195" (0,5mm) and .0275" (0,7mm).

These products are used in applications where electrical isolation is required. The plastic sleeve provides insulation of the spring pin terminal for situations such as passing through a printed circuit board or conductive housing, or for isolating the pin from surrounding conductive components or elements in an assembly.

All three series are available in bulk or on 16mm wide carrier tape for automated pick-and-place assembly. The insulator sleeve keeps the component stable in the pocket to facilitate the pick-and-place process.

The high temperature nylon 46 insulators are suitable for RoHS soldering processes. The spring pins are constructed of precision-machined, gold-plated components and gold-plated beryllium copper springs. (The 807-22-001-30-000101 has a gold-plated stainless steel spring.) All are rated at 2 amps continuous, 3 amps peak and have a mechanical life of 1,000,000 cycles.

For more information, please visit: www.mill-max.com/PR657.



## SPRING-LOADED CONNECTORS

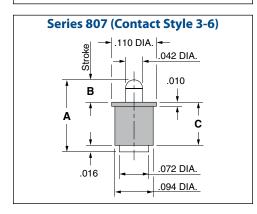
### SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • SURFACE MOUNT



- Discrete insulated spring-loaded pins; available in seven heights from .100" to .236", with working travel from .012" to .0275"
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for SMT soldering processes
- 807 series, contact styles 0 through 6, are available in bulk or on 16mm wide carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. See below for ordering information

## Series 807 (Contact Style 0) | .110 DIA. | .042 DIA. | .010 | .010 | .010 | .010 | .072 DIA. | .094 D

# Series 807 (Contact Style 1 & 2) 110 DIA. 042 DIA. 010 A C 072 DIA. 094 DIA.



#### ORDERING INFORMATION

Series 807 (Bulk Packaged)	
807-22-001-30-00X101 Specify contact style 0-6	

#### Series 807 (Tape & Reel Packaged)

807-22-001-30-00X191

Specify contact style 0-6

Contact Style	Initial Height (A)	Working Travel	Full Stroke Range (B)	Sleeve Height (C)	Quantity per Reel
0	.100	.012	.020024	.055	2,620
1	.137	.0195	.030039	.082	1,750
2	.155	.0195	.035039	.090	1,750
3	.177	.0275	.045055	.106	1,055
4	.197	.0275	.045055	.126	780
5	.217	.0275	.045055	.146	780
6	.236	.0275	.045055	.165	780

#### **Technical Specifications**

#### **Materials:**

Contact piston & base: Machined copper alloy plated  $20\mu''$  gold over  $100\mu''$  nickel Spring (Contact style 0): Stainless Steel-plated  $10\mu''$  gold Spring (Contact style 1-6): Beryllium copper-plated  $10\mu''$  gold Insulator: High temperature thermoplastic, rated UL94 V-0

#### Mechanical

Spring force @ initial height (A) (Contact style 0-6): 25 grams Spring force @ mid stroke (B/2) (Contact style 0): 70 grams Spring force @ mid stroke (B/2) (Contact style 1-6): 60 grams Durability: 1,000,000 cycles

#### **Electrical:**

Current rating: 2A (continous), 3A (peak) per contact Contact resistance:  $20m\Omega$  max.

Insulation resistance:  $10,000M\Omega$  min. Dielectric strength:  $10,000M\Omega$  min.





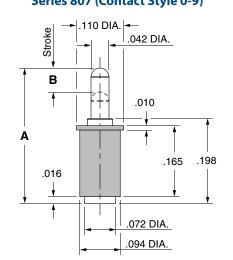
### SPRING-LOADED CONNECTORS

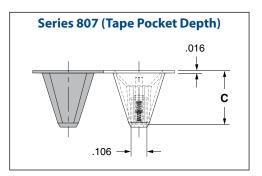
### SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • SURFACE MOUNT



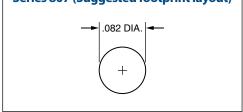
- Discrete insulated spring-loaded pins; available in ten heights from .255" to .430", with working travel of .0275"
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most SMT soldering processes
- 807 series, contact styles 0 through 9, are available in bulk or on 16mm wide carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. See below for ordering information

#### Series 807 (Contact Style 0-9)

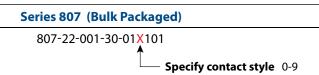




#### **Series 807 (Suggested footprint layout)**



#### ORDERING INFORMATION



#### Series 807 (Tape & Reel Packaged)

807-22-001-30-01X191

Specify contact style 0-9

Contact Style	Initial Height (A)	Working Travel	Full Stroke Range (B)	Tape Depth (C)	Quantity per Reel
0	.255	.0275	.045055	.285	750
1	.275	.0275	.045055	.285	750
2	.295	.0275	.045055	.326	600
3	.315	.0275	.045055	.326	600
4	.335	.0275	.045055	.361	550
5	.350	.0275	.045055	.361	550
6	.370	.0275	.045055	.401	475
7	.390	.0275	.045055	.401	475
8	.410	.0275	.045055	.441	430
9	.430	.0275	.045055	.441	430

#### **Technical Specifications**

#### **Materials:**

Contact piston & base: Machined copper alloy plated  $20\mu''$  gold over  $100\mu''$  nickel Spring (Contact style 0-9): Beryllium copper-plated  $10\mu''$  gold Insulator: High temperature thermoplastic, rated UL94 V-0

#### **Mechanical:**

Spring force @ initial height (A) (Contact style 0-9): 25 grams Spring force @ mid stroke (B/2) (Contact style 0-9): 60 grams Durability: 1,000,000 cycles

#### **Electrical:**

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

Contact resistance:  $20m\Omega$  max. Insulation resistance:  $10,000M\Omega$  min. Dielectric strength: 700Vrms min.





## SPRING-LOADED CONNECTORS

### SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • THROUGH-HOLE MOUNT



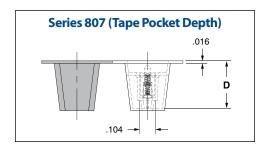
- Discrete insulated spring-loaded pins; available in six heights from .137" to .236", with working travel of .0195" & .0275"
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most SMT soldering processes
- 807 series, contact styles 1 through 6, are available in bulk or on 24mm wide carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. See below for ordering information

# Series 807 (Contact Style 1 & 2) 110 DIA. .042 DIA. .010 B .017 DIA. .072 DIA. .094 DIA.

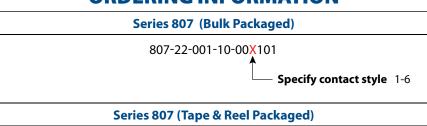
# Series 807 (Contact Style 3, 4, 5 & 6) B A .016 C .017 DIA. .017 DIA.

.072 DIA.

.094 DIA.



#### ORDERING INFORMATION



Contact Style	Initial Height (A)	Working Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	.137	.0195	.030039	.082	.236	880
2	.155	.0195	.035039	.090	.236	880
3	.177	.0275	.045055	.106	.278	745
4	.197	.0275	.045055	.126	.278	745
5	.217	.0275	.045055	.146	.317	640
6	.236	.0275	.045055	.165	.317	640

#### Materials:

#### **Technical Specifications**

Contact piston & base: Machined copper alloy plated  $20\mu''$  gold over  $100\mu''$  nickel Spring (Contact style 1-6): Beryllium copper-plated  $10\mu''$  gold Insulator: High temperature thermoplastic, rated UL94 V-0

#### **Mechanical:**

Spring force @ initial height (A) (Contact style 1-6): 25 grams Spring force @ mid stroke (B/2) (Contact style 1-6): 60 grams Durability: 1,000,000 cycles

#### **Electrical:**

Current rating: 2A (continous), 3A (peak) per contact Contact resistance:  $20m\Omega$  max. Insulation resistance:  $10,000M\Omega$  min. Dielectric strength: 700Vrms min.



