WWW.MILL-MAX.COM

SPRING-LOADED CONNECTORS



WWW.MILL-MAX.COM

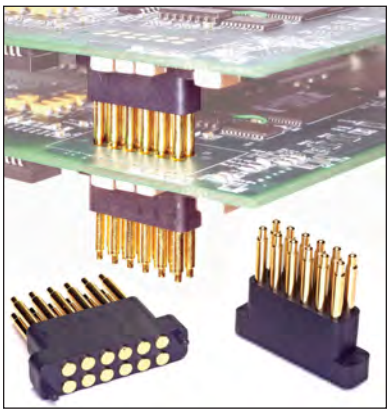
MILL-MAX SPRING-LOADED CONNECTORS ARE IDEAL FOR A WIDE RANGE OF APPLICATIONS, from portable data acquisition units and mobile communication to medical and military equipment applications. Their unique design can be the perfect solution for many situations where establishing an electrical path between mating points is a challenge, including problematic vibratory environments.

When strategically placed within an assembly and utilized correctly (shielded from over compression and direct side load forces,) spring-loaded connectors provide a reliable connection exceeding a million cycles.









SOME TYPICAL APPLICATIONS INCLUDE:

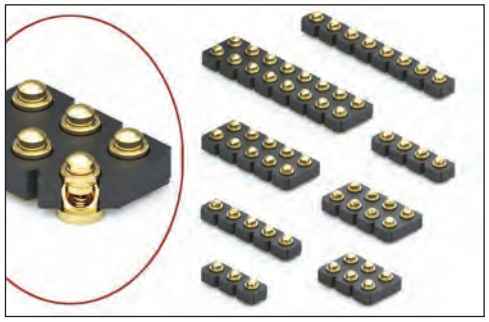
- The internal battery connection in portable instruments, or as the external battery connection for charging these instruments (docking stations).
- As a method for stacking printed circuit boards in an assembly. Utilizing spring pin connectors is a convenient approach to creating mezzanine-tiered board modules that can be assembled and disassembled quickly.
- Blind-mating applications: The spring pin piston need only make contact with its mating surface. This is typically a land or pad that is larger than the plunger diameter. In situations where the assembly process doesn't allow for visibility, spring pins are the optimum choice.

MILL-MAX SPRING-LOADED CONNECTORS CAN MATE TO THE FOLLOWING SURFACES:

- A conductive input/output pad found on the instrument pack itself.
- A gold-plated land on a circuit board. A hard gold over nickel-plated surface is recommended for the mating surface. This is the same as would be used for the printed circuit fingers associated with card edge connectors.
- Individual Mill-Max gold-plated nail head pins which can be soldered to the mating circuit board to serve as targets.
- Mill-Max Target Connectors which provide a large, flat gold-plated circuit path to the board.

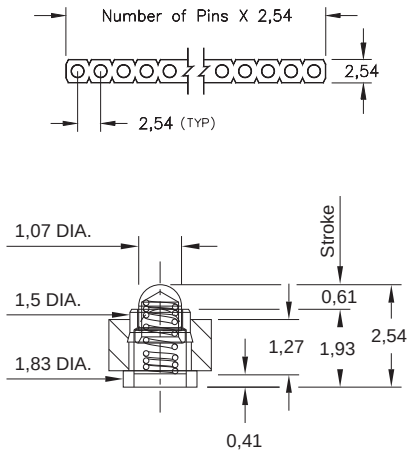
SPRING-LOADED CONNECTORS

SERIES 815 & 817 • 2,54 GRID SURFACE MOUNT, ULTRA LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

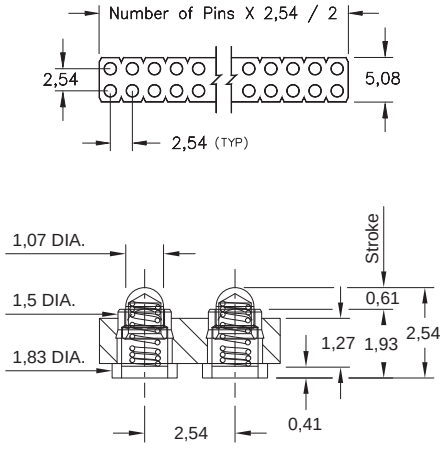


- Modular contacts for use on 2,54 grid, available in a height of 2,54, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,3 mid. stroke and a 0,61 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 815 & 817 series contact strips are designed for manual placement onto a 2,08 Ø solder pad prior to reflow soldering

SINGLE ROW Series 815



DOUBLE ROW Series 817



ORDERING INFORMATION

Single Row Series 815

815-22-0XX-30-001101

Specify number of contacts 01-32

For 815 and 817 Tape & Reel packaging, see page 12.1

Double Row Series 817

817-22-0XX-30-001101

Specify number of contacts 04-72

For 815 and 817 Tape & Reel packaging, see page 12.1

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,3): 60 grams
Durability: Up to 1,000,000 cycles
Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

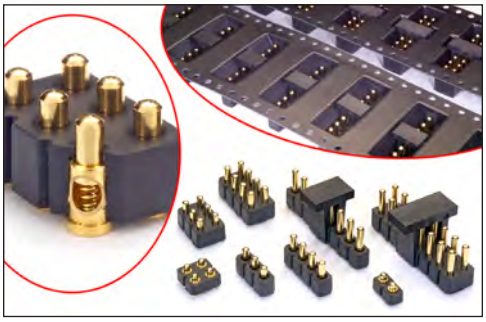
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

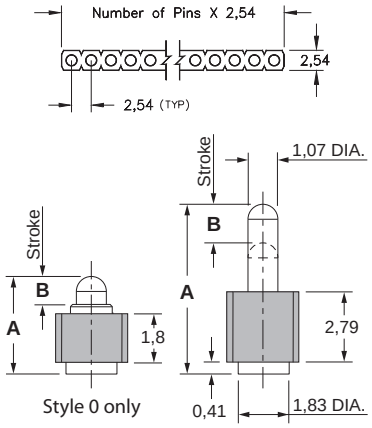
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

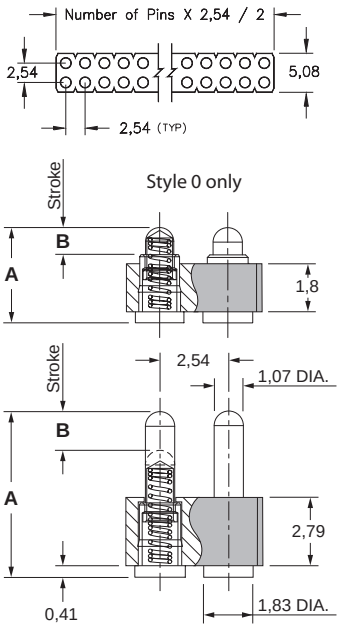
SERIES 811 & 813 • 2,54 GRID SURFACE MOUNT, LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS



SINGLE ROW Series 811



DOUBLE ROW Series 813



- Modular contacts for use on 2,54 grid, available in five heights from 3,48 to 5,99, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the assembly
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 811 & 813 series, contact styles 1 through 4, are available on 32mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12 for strip lengths available and ordering information

ORDERING INFORMATION

Single Row Series 811

811-22-0XX-30-00X101

Specify number of contacts 01-64 — **Specify contact style** 0-4

Double Row Series 813

813-22-0XX-30-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-4

For 811 and 813 Tape & Reel packaging, see page 12

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
0	3,48	0,99
1	4,50	1,14
2	5,0	1,39
3	5,51	1,39
4	5,99	1,39

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: Up to 1,000,000 cycles
Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

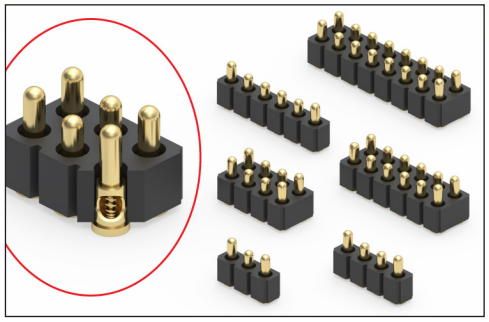
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

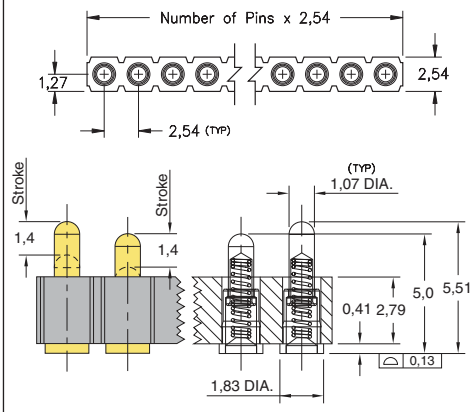
SPRING-LOADED CONNECTORS

SERIES 811 & 813 • 2,54 GRID SURFACE MOUNT, FIRST MATE/LAST BREAK • SINGLE AND DOUBLE ROW STRIPS



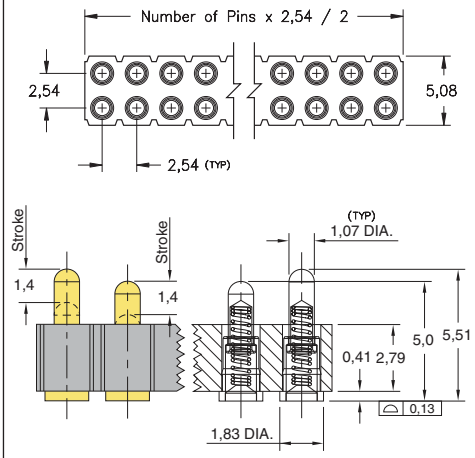
- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Taller pins in the end positions make contact first and break contact last to address applications where connection sequence is required
- Each pin has a full stroke capability of 1,4, allowing all pins to be compressed to the rated mid stroke while accounting for the 0,51 initial height offset of the 0900-3 (5,51) and 0900-2 (5,0)
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic

SINGLE ROW Series 811



Coplanarity 0,13. For Pin Counts >10 positions consult Technical Support

DOUBLE ROW Series 813



Coplanarity 0,13. For Pin Counts >20 positions consult Technical Support

ORDERING INFORMATION

Single Row Series 811

811-22-0XX-30-022101

Specify number of contacts 03-10

Double Row Series 813

813-22-0XX-30-022101

Specify number of contacts 06-20

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles
Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

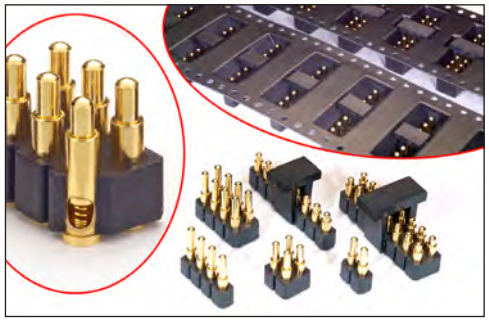
Electrical:

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

RoHS-2 2011/65/EU

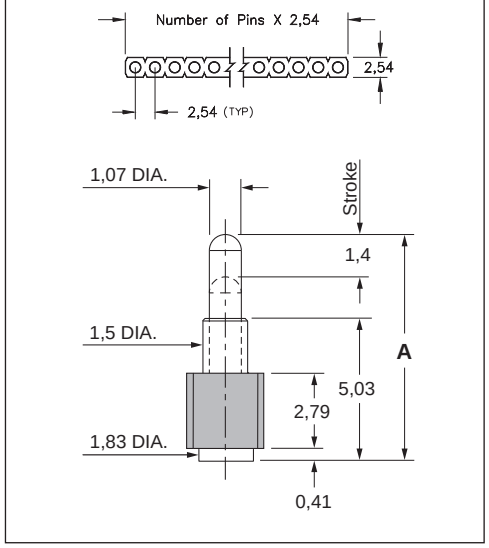
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 812 & 814 • 2,54 GRID SURFACE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS

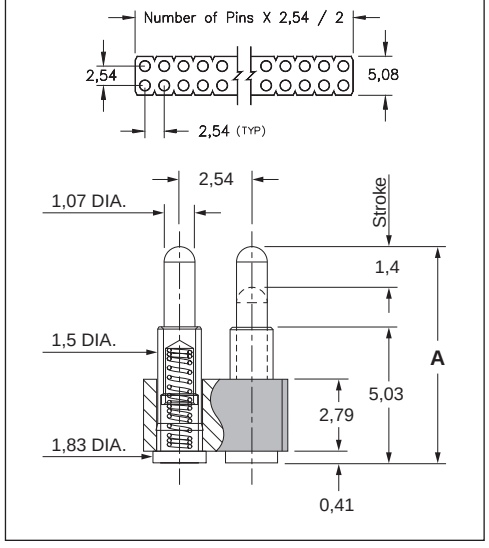


- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Extended body provides greater bearing surface for increased strength & plunger protection
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series, contact styles 0 through 9, are available on 32mm or 44mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12 for strip lengths available and ordering information

SINGLE ROW Series 812



DOUBLE ROW Series 814



ORDERING INFORMATION

Single Row Series 812

812-22-0XX-30-00X101

Specify number of contacts 02-64 — **Specify contact style** 0-9

Double Row Series 814

814-22-0XX-30-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-9

For 812 and 814 Tape & Reel packaging, see page 12

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	6,48	5	8,89
1	6,99	6	9,4
2	7,49	7	9,91
3	8,0	8	10,41
4	8,51	9	10,92

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 10µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles
Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

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

RoHS-2 2011/65/EU

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

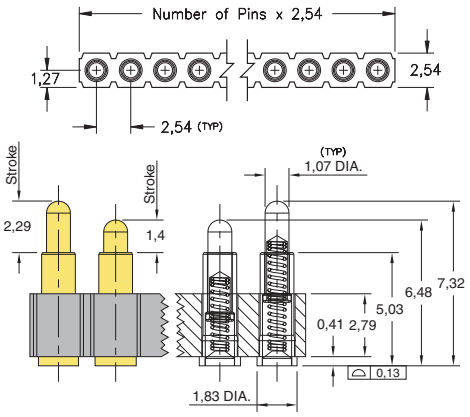
SPRING-LOADED CONNECTORS

SERIES 812 & 814 • 2,54 GRID SURFACE MOUNT, FIRST MATE/LAST BREAK • SINGLE AND DOUBLE ROW STRIPS



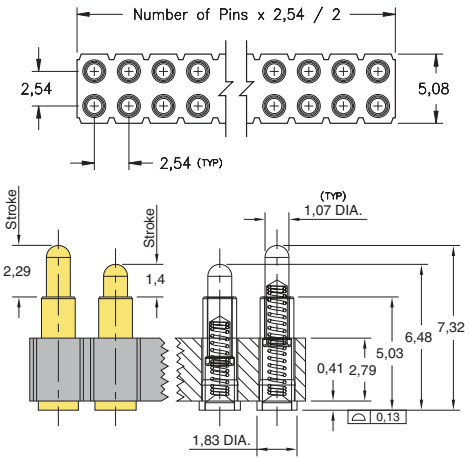
- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Taller pins in the end positions make contact first and break contact last to address applications where connection sequence is required
- The 0913-0 pin has a full stroke capability of 2,29, allowing all pins to be compressed to their rated mid stroke while accounting for the 0,84 initial height offset of the 0913-0 (7,32) and 0907-0 (6,48)
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- 0907-0 spring pins have 0,7 mid stroke and 1,4 max. stroke, 0913-0 spring pin have 1,14 mid stroke and 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic

SINGLE ROW Series 812



Coplanarity 0,13. For Pin Counts >10 positions consult Technical Support

DOUBLE ROW Series 814



Coplanarity 0,13. For Pin Counts >20 positions consult Technical Support

ORDERING INFORMATION

Single Row Series 812

812-22-0XX-30-030101

Specify number of contacts 03-10

Double Row Series 814

814-22-0XX-30-030101

Specify number of contacts 06-20

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (0907-0 & 0913-0): 25 grams
Spring force @ mid stroke (0907-0 & 0913-0): 60 grams
Durability: Up to 1,000,000 cycles
Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

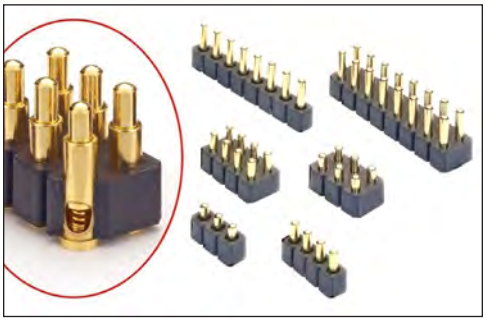
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

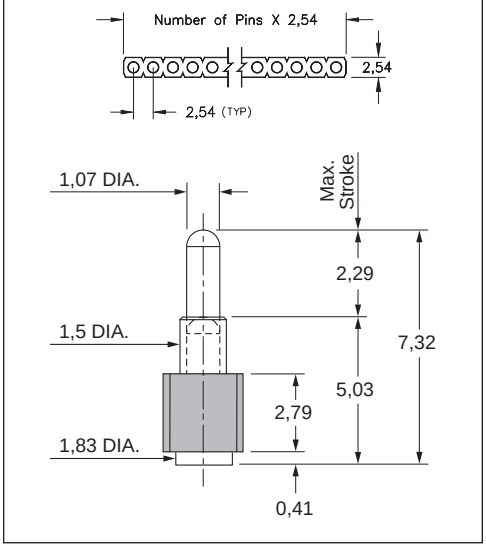
SPRING-LOADED CONNECTORS

SERIES 819 & 820 • 2,54 GRID SURFACE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

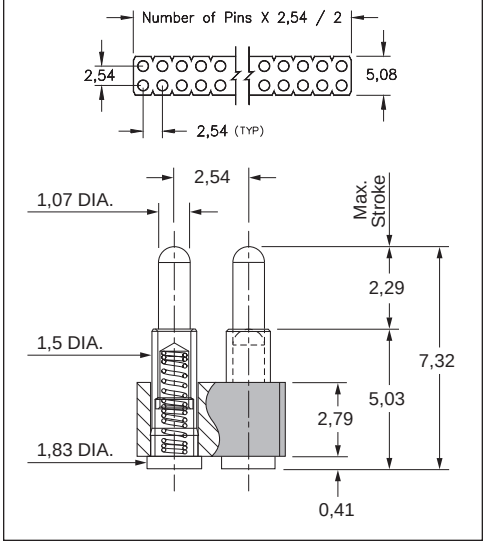


- Modular contacts for use on 2,54 grid, available in a height of 7,32, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 819 & 820 series contact strips are designed for placement onto a Ø 2,08 solder pad prior to reflow soldering
- Both 819 & 820 series, are available on carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481. See page 12.1 for strip lengths available and ordering information

SINGLE ROW Series 819



DOUBLE ROW Series 820



ORDERING INFORMATION

Single Row Series 819

819-22-0XX-30-001101

Specify number of contacts 01-64

For 819 and 820 Tape & Reel packaging, see page 12.1

Double Row Series 820

820-22-0XX-30-001101

Specify number of contacts 04-72

For 819 and 820 Tape & Reel packaging, see page 12.1

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 0,25µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (1,14): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

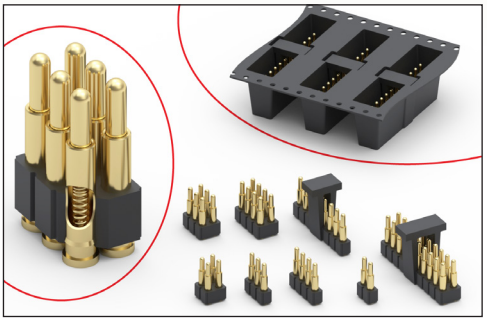
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

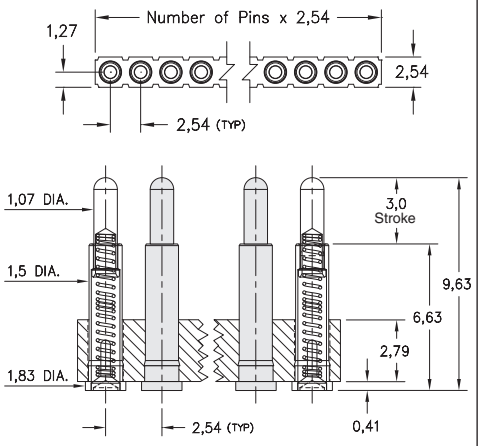
SPRING-LOADED CONNECTORS

SERIES 837 & 839 • 2,54 GRID SURFACE MOUNT, 3MM MAX. STROKE • SINGLE AND DOUBLE ROW STRIPS



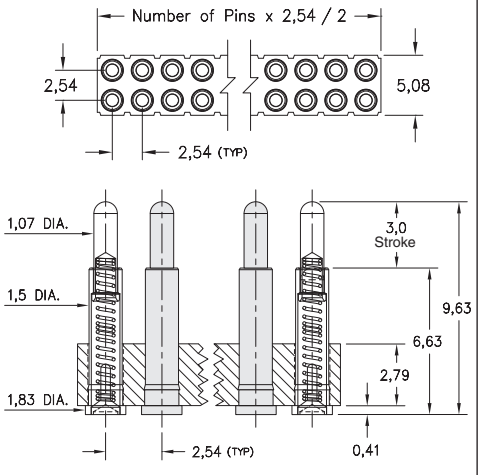
- Modular contacts for use on 2,54 grid, available in single and double row contact strips with recommended rated travel of 0,76 - 2,54 and max. stroke of 3,0 +0/-0,25
- Precision-machined piston / base and gold-plated components
- Extended body provides greater bearing surface for increased strength & plunger protection
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for SMT soldering processes
- Both 837 & 839 series, are available on 44mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481
- 837 & 839 series contact strips are designed for manual or automatic placement onto 2,08 Ø solder pads

SINGLE ROW Series 837



Coplanarity 0,13. For Pin Counts >10 positions consult Technical Support

DOUBLE ROW Series 839



Coplanarity 0,13. For Pin Counts >20 positions consult Technical Support

ORDERING INFORMATION

Series 837 (Bulk Packaged)

837-22-0XX-30-001101

Specify number of contacts 01-64

Series 837 (Tape & Reel Packaged, 200 parts per reel)

837-22-0XX-30-001191

Specify number of contacts 02-12

Series 839 (Bulk Packaged)

839-22-0XX-30-001101

Specify number of contacts 04-72

Series 839 (Tape & Reel Packaged, 200 parts per reel)

839-22-0XX-30-001191

Specify number of contacts 04-24

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Stainless Steel-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (1,5): 85 grams
Durability: Up to 1,000,000 cycles

Electrical:

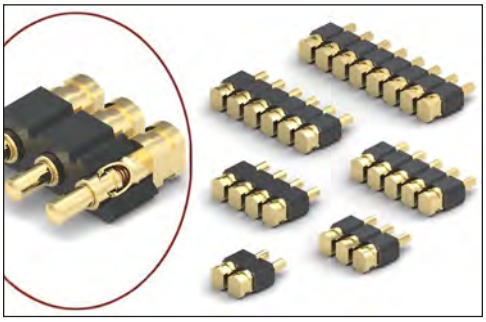
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

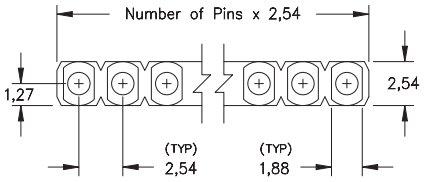
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

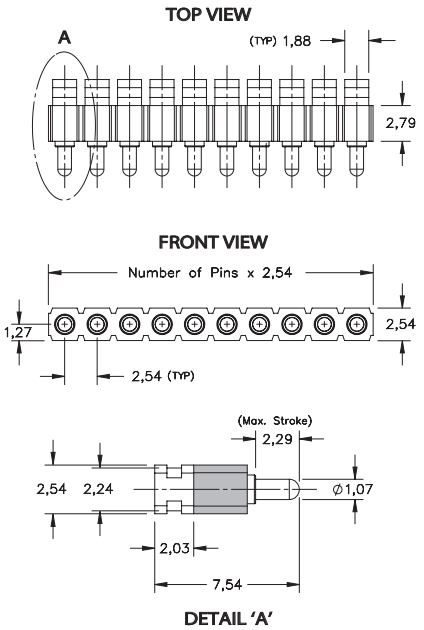
SPRING-LOADED CONNECTORS

SERIES 810 • 2,54 GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS

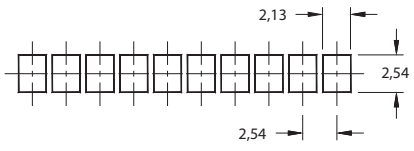


SINGLE ROW Series 810





Suggested P.C.B. FOOTPRINT



Coplanarity 0,13. For Pin Counts >10 positions consult Technical Support

- Modular contacts for use on 2,54 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Ideal for daisy chaining of P.C.B.'s when mated with right angle target connectors (series 399...10-008) or for mating boards in a perpendicular orientation
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke & 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 810 series contact strips are designed for manual placement onto solder pads

ORDERING INFORMATION

Single Row Series 810

810-22-0XX-40-001101

Specify number of contacts 01-10

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (1,14): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

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

RoHS-2 2011/65/EU

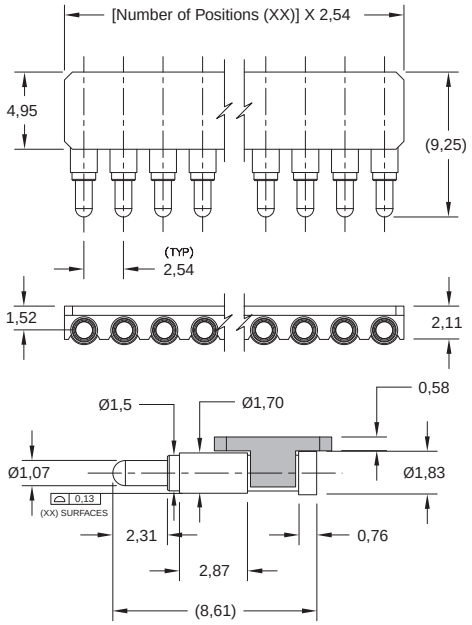
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

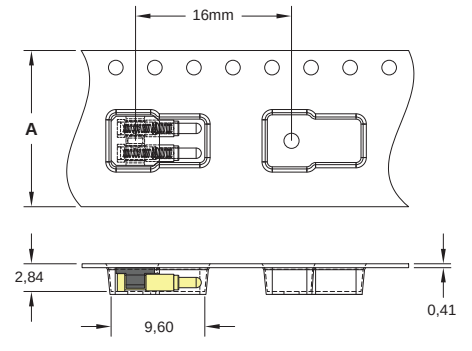
SERIES 810 • 2,54 GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS



Series 810 Single Row



Series 810 (Tape Pocket Details)



- Modular contacts for use on 2,54 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Ideal for daisy chaining of P.C.B.'s when mated with horizontal surface mount target connectors series 319-10-1XX-40-080001 or for mating boards in a perpendicular orientation
- Pistons have a 1,14 mid. stroke & 2,29 max. stroke
- High temperature thermoplastic insulators are suitable for surface mount processes
- The 810 series are packaged on tape & reel - 16, 24, 32 or 44 mm wide x 16 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D

ORDERING INFORMATION

Series 810 (Tape & Reel Packaged)

810-22-0XX-40-005191

Specify number of contacts 02-10

Number of Contacts	Tape Width Size (A)	Quantity per Reel
2	16mm	1,450
3	16mm	1,450
4	24mm	1,450
5	24mm	1,450
6	24mm	1,450
7	32mm	1,450
8	32mm	1,450
9	44mm	1,450
10	44mm	1,450

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 2-10): Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (Contact style 2-10): 25 grams
Spring force @ mid stroke (Contact style 2-10): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

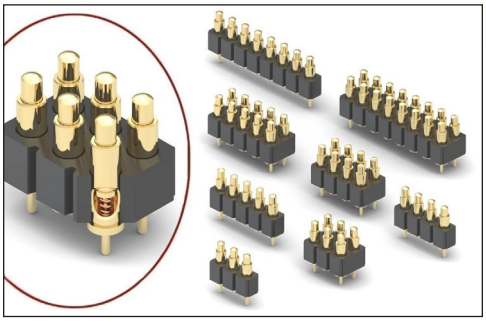
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

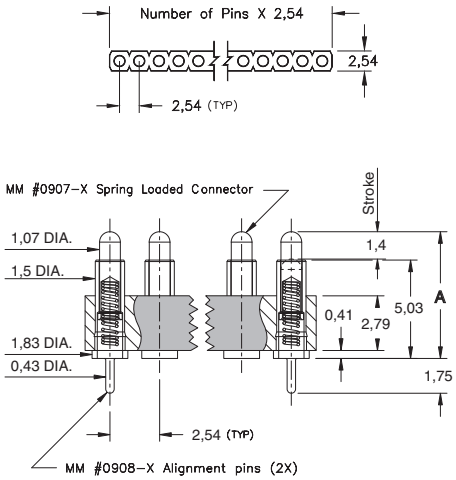
MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

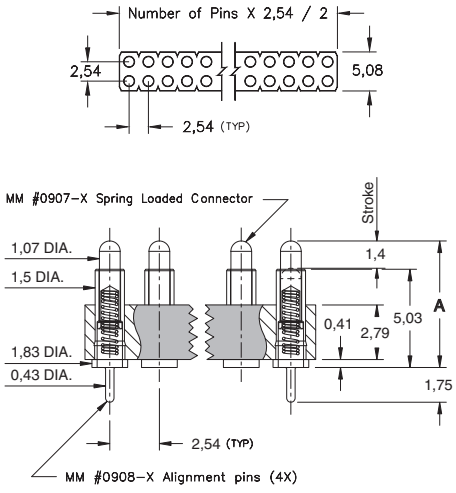
SERIES 812 & 814 • 2,54 GRID SURFACE MOUNT WITH ALIGNMENT PINS • SINGLE AND DOUBLE ROW STRIPS



SINGLE ROW Series 812



DOUBLE ROW Series 814



- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series contact strips are designed for manual placement, Ø 0,71±0,076 plated through-holes in the circuit board are required for the alignment pins prior to intrusive reflow soldering

ORDERING INFORMATION

Single Row Series 812...01X101

812-22-0XX-30-01X101

Specify number of contacts 03-64 — **Specify contact style** 0-9

Double Row Series 814...01X101

814-22-0XX-30-01X101

Specify number of contacts 06-72 — **Specify contact style** 0-9

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	6,48	5	8,89
1	6,99	6	9,4
2	7,49	7	9,91
3	8,0	8	10,41
4	8,51	9	10,92

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

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

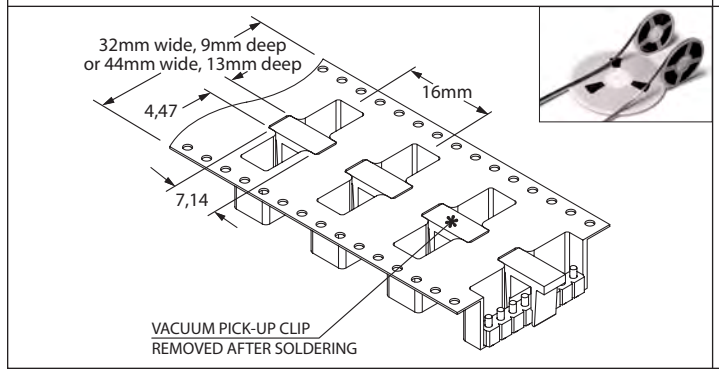
RoHS-2 2011/65/EU

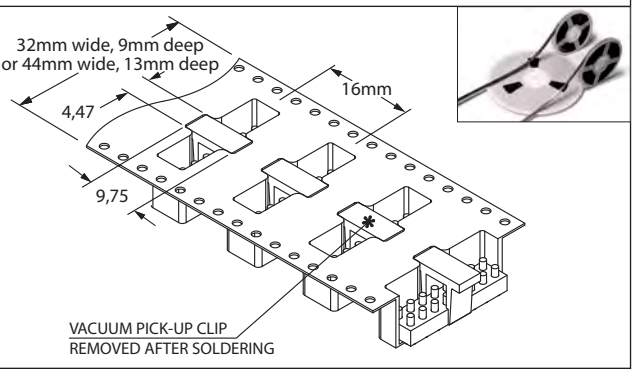
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 811, 812, 813, 814 • 2,54 GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

Ordering Information for Series 811/812/813/814 in Carrier Tape

Single Row Series 811	Double Row Series 813
811-22-0XX-30-00X191 **Specify contact style** 0-4 **Specify number of contacts** 02-08 (32mm wide tape, 400 parts per 330mm reel)	813-22-0XX-30-00X191 **Specify contact style** 0-4 **Specify number of contacts** 04-16 (32mm wide tape, 400 parts per 330mm reel)
Single Row Series 811	**Double Row Series 813**
811-22-0XX-30-00X191 **Specify contact style** 1-4 **Specify number of contacts** 09-12 (44mm wide tape, 200 parts per 330mm reel)	813-22-0XX-30-00X191 **Specify contact style** 1-4 **Specify number of contacts** 18-24 (44mm wide tape, 200 parts per 330mm reel)
Single Row Series 812	**Double Row Series 814**
812-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 02-08 (32mm wide tape, 400 parts per 330mm reel)	814-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 04-16 (32mm wide tape, 400 parts per 330mm reel)
Single Row Series 812	**Double Row Series 814**
812-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 09-12 (44mm wide tape, 200 parts per 330mm reel)	814-22-0XX-30-00X191 **Specify contact style** 0-2 **Specify number of contacts** 18-24 (44mm wide tape, 200 parts per 330mm reel)
Single Row Series 812	**Double Row Series 814**
812-22-0XX-30-00X191 **Specify contact style** 3-9 **Specify number of contacts** 02-12 (44mm wide tape, 200 parts per 330mm reel)	814-22-0XX-30-00X191 **Specify contact style** 3-9 **Specify number of contacts** 04-24 (44mm wide tape, 200 parts per 330mm reel)



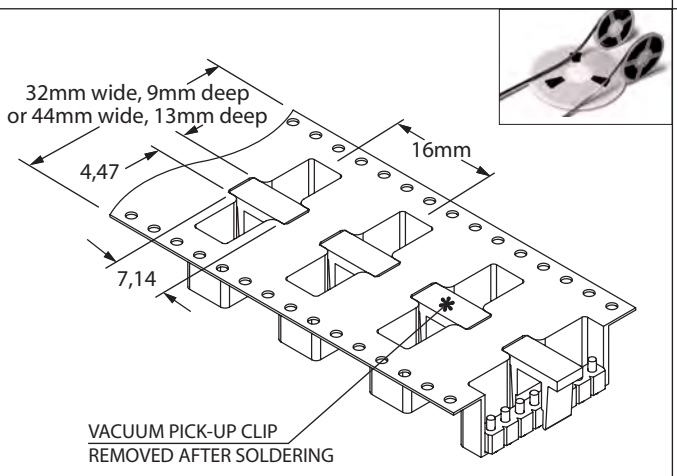


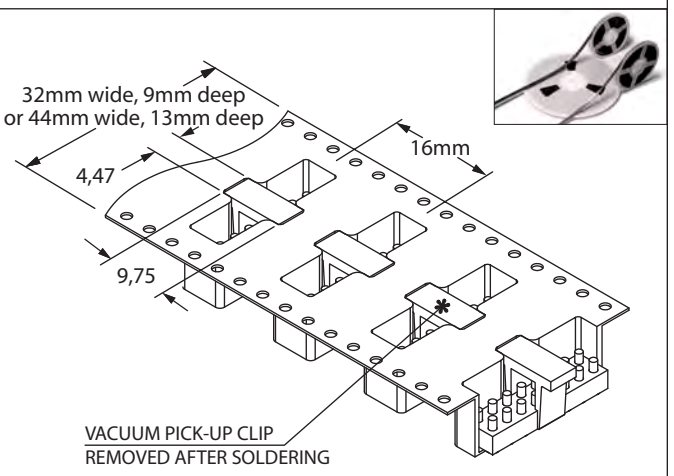
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SERIES 815, 817, 819, 820 • 2,54 GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

Ordering Information for Series 815/817/819/820 in Carrier Tape

Single Row Series 815	Double Row Series 817
815-22-0XX-30-001191 **Specify number of pins** 02-10 (44mm wide tape, 910 parts per 330mm reel)	817-22-0XX-30-001191 **Specify number of pins** 04-20 (44mm wide tape, 680 parts per 330mm reel)
Single Row Series 819	**Double Row Series 820**
819-22-0XX-30-001191 **Specify number of pins** 02-08 (32mm wide tape, 400 parts per 330mm reel)	820-22-0XX-30-001191 **Specify number of pins** 04-16 (32mm wide tape, 400 parts per 330mm reel)
Single Row Series 819	**Double Row Series 820**
819-22-0XX-30-001191 **Specify number of pins** 09-12 (44mm wide tape, 200 parts per 330mm reel)	820-22-0XX-30-001191 **Specify number of pins** 18-24 (44mm wide tape, 200 parts per 330mm reel)

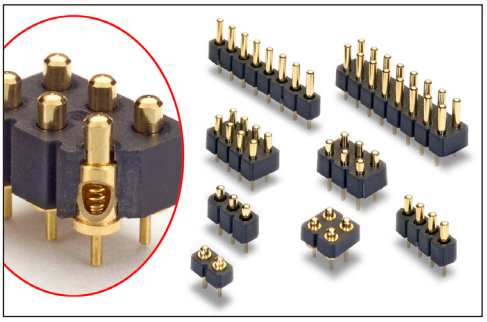




Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

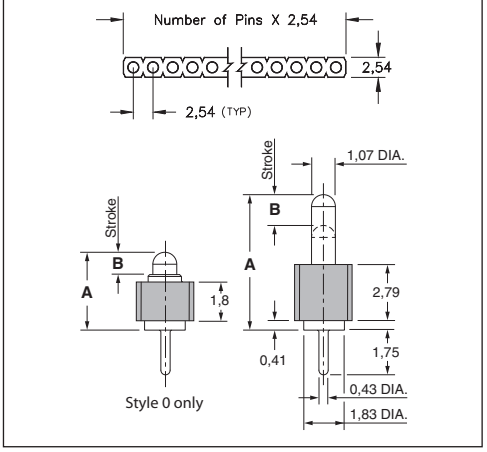
SPRING-LOADED CONNECTORS

SERIES 821 & 823 • 2,54 GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

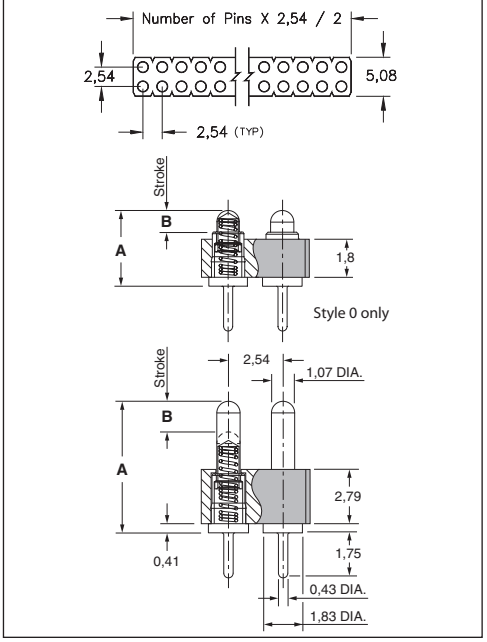


- Modular contacts for use on 2,54 grid, available in five heights from 3,48 to 5,99, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the assembly
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 821 & 823 series contact strips are designed for manual placement into Ø 0,76±0,076 plated through-holes in the circuit board prior to hand, wave or reflow soldering

SINGLE ROW Series 821



DOUBLE ROW Series 823



ORDERING INFORMATION

Single Row Series 821

821-22-0XX-10-00X101

Specify number of contacts 02-64 — **Specify contact style** 0-4

Double Row Series 823

823-22-0XX-10-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-4

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
0	3,48	0,99
1	4,50	1,14
2	5,0	1,39
3	5,51	1,39
4	5,99	1,39

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

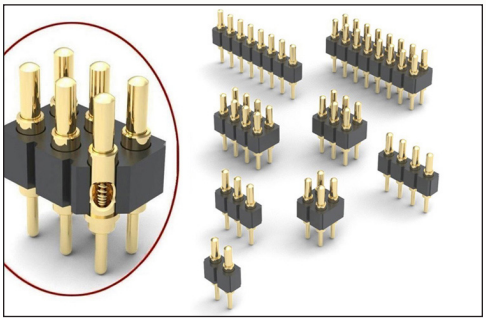
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

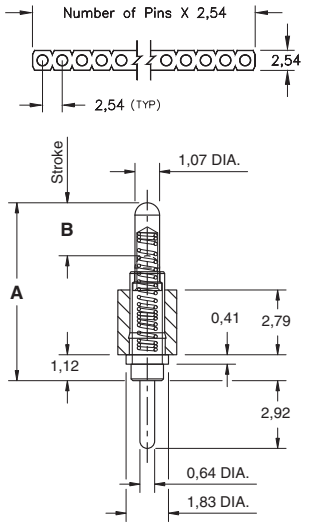
SPRING-LOADED CONNECTORS

SERIES 825 & 827 • 2,54 GRID THROUGH-HOLE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

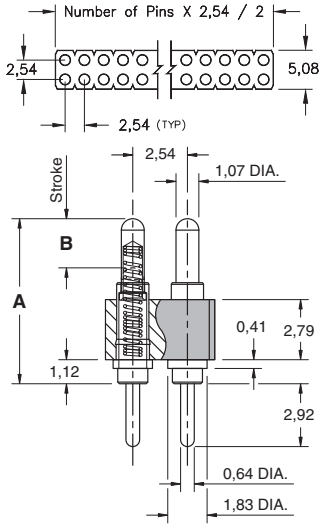


- Modular contacts for use on 2,54 grid, available in four heights from 7,67 to 9,96, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 825 & 827 series contact strips are designed for manual placement into Ø0,965±0,076 plated through-holes in the circuit board prior to hand, wave or reflow soldering

SINGLE ROW Series 825



DOUBLE ROW Series 827



ORDERING INFORMATION

Single Row Series 825

825-22-0XX-10-00X101

Specify number of contacts 02-64 — **Specify contact style** 1-4

Double Row Series 827

827-22-0XX-10-00X101

Specify number of contacts 04-72 — **Specify contact style** 1-4

CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
1	7,67	2,29
2	8,43	2,29
3	9,19	2,29
4	9,96	2,29

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

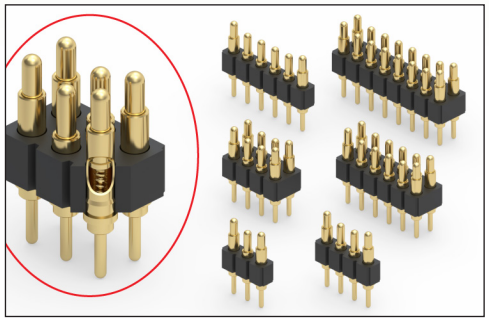
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

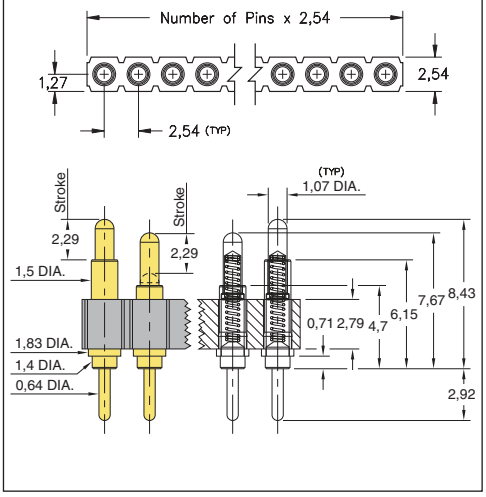
SPRING-LOADED CONNECTORS

SERIES 825 & 827 • 2,54 GRID THROUGH-HOLE MOUNT, FIRST MATE/LAST BREAK • SINGLE AND DOUBLE ROW STRIPS

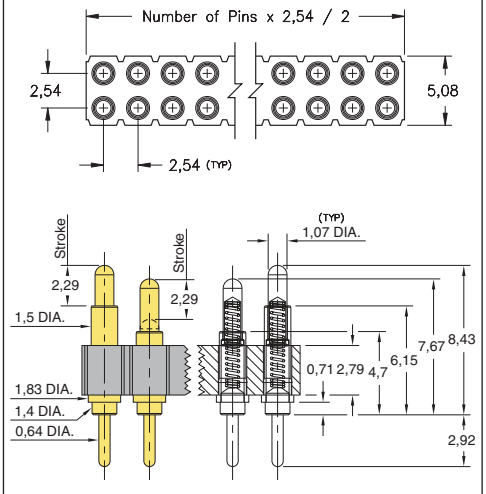


- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Taller pins in the end positions make contact first and break contact last to address applications where connection sequence is required
- Each pin has a full stroke capability of 2,29, allowing all pins to be compressed to the rated mid stroke while accounting for the 0,76 initial height offset of the 0914-1 (8,43) and 0914-0 (7,67)
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic

SINGLE ROW Series 825



DOUBLE ROW Series 827



ORDERING INFORMATION

Single Row Series 825

825-22-0XX-10-020101

Specify number of contacts 03-10

Double Row Series 827

827-22-0XX-10-020101

Specify number of contacts 06-20

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (1,14): 60 grams
Durability: Up to 1,000,000 cycles
Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins), For higher pin counts, contact Technical Support

Electrical:

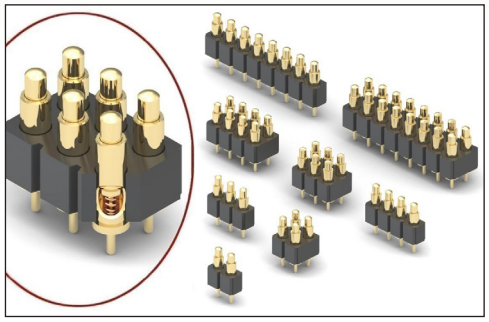
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

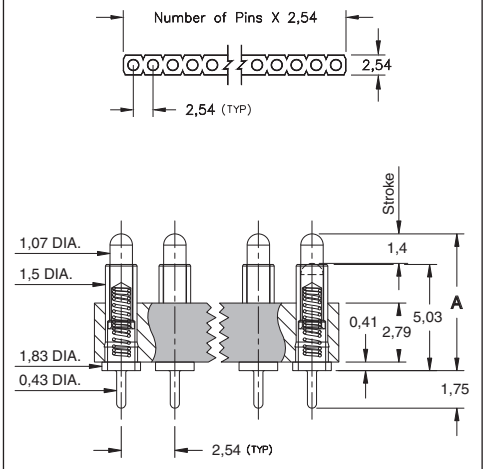
SPRING-LOADED CONNECTORS

SERIES 816 & 818 • 2,54 GRID THROUGH-HOLE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS

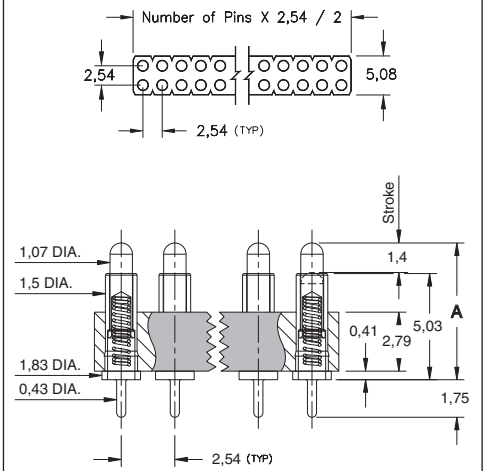


- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 816 & 818 series contact strips are designed for manual placement into Ø 0,76±0,076 plated through-holes in the circuit board prior to intrusive reflow soldering

SINGLE ROW Series 816...00X101



DOUBLE ROW Series 818...00X101



ORDERING INFORMATION

Single Row Series 816...00X101

816-22-0XX-10-00X101

Specify number of contacts 02-64 — **Specify contact style** 0-9

Double Row Series 818...00X101

818-22-0XX-10-00X101

Specify number of contacts 04-72 — **Specify contact style** 0-9

CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	6,48	5	8,89
1	6,99	6	9,4
2	7,49	7	9,91
3	8,0	8	10,41
4	8,51	9	10,92

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm, gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

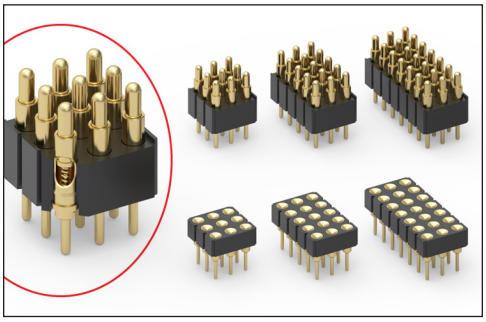
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

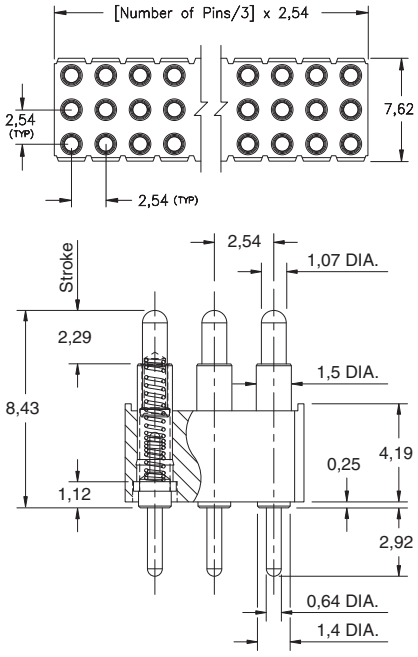
SPRING-LOADED CONNECTORS

SERIES 804 & 805 • 2,54 GRID THROUGH-HOLE MOUNT • LONG STROKE TRIPLE ROW STRIPS AND MATING TARGET CONNECTORS

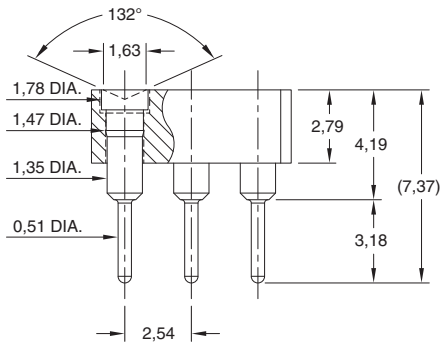


- Modular contacts for use on 2,54 grid, supplied in triple row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Spring pins have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- 804 & 805 series High temperature thermoplastic insulators are suitable for wave and reflow processes
- 804 series contact strips are designed for manual placement into Ø 0,965±0,076 plated through-holes in the circuit board prior to hand, wave or reflow soldering
- 805 series Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. This series is offered with a concave face for making contact with our standard 1,07 dia. spring pin plungers

TRIPLE ROW Series 804



TRIPLE ROW Series 805



ORDERING INFORMATION

Triple Row Series 804

804-22-0XX-10-004101

Specify number of contacts 09-96

Triple Row Mating Target Series 805

805-10-0XX-00-006000

Specify number of contacts 09-96

Technical Specifications for 804 Series

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (1,14): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

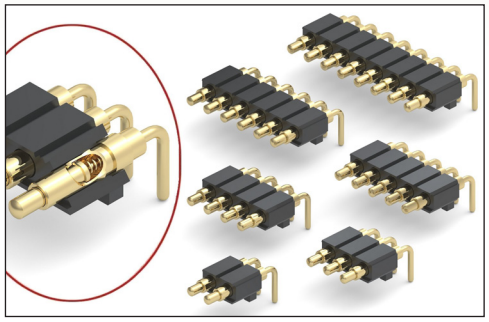
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

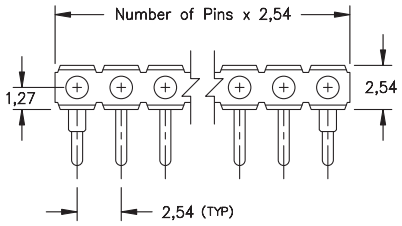
SPRING-LOADED CONNECTORS

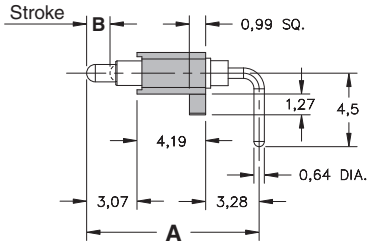
SERIES 829 • 2,54 GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS



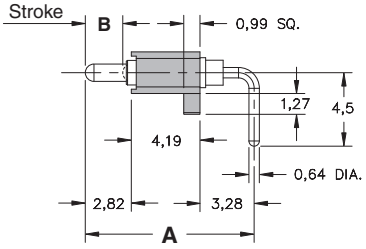
- Modular contacts for use on 2,54 grid. Supplied in single row strips with mounting pegs for support
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- 829 series contact strips are designed for manual placement into Ø 0,94±0,076 plated through-holes in the circuit board prior to wave or reflow soldering

SINGLE ROW Series 829



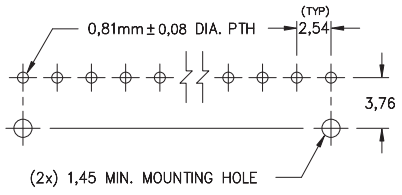


Contact style 1 only



Contact style 2 only

Suggested P.C.B Footprint



ORDERING INFORMATION

Single Row Series 829

829-22-0XX-20-00X101

Specify number of contacts 01-20

Specify contact style 1 or 2

CONTACT STYLE	INITIAL LENGTH A	MAX. STROKE B
1	10,54	1,4
2	10,31	2,3

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial length (A): 25 grams
Spring force @ mid stroke (B/2): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

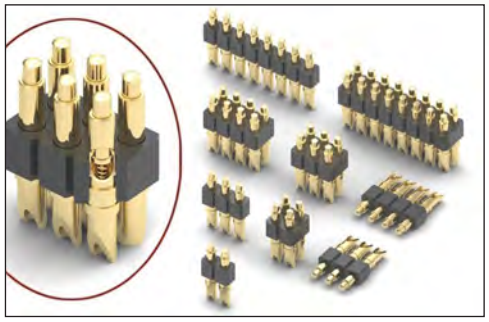
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

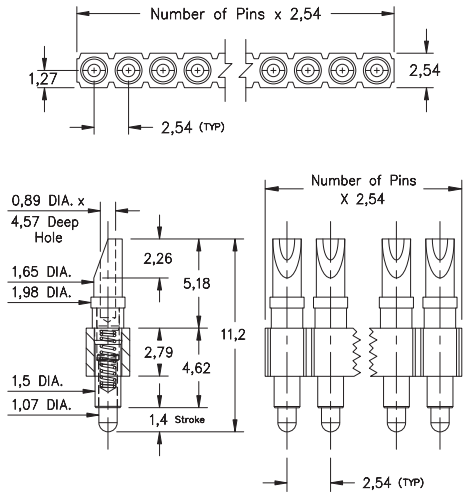
SPRING-LOADED CONNECTORS

SERIES 824 & 826 • 2,54 GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

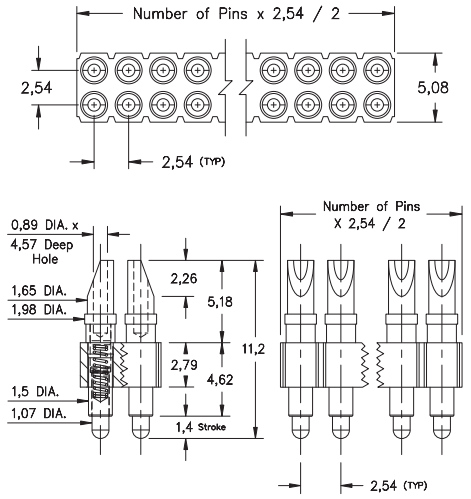


- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic
- Both 824 & 826 series strips have spring pins with wire termination soldercups. The soldercups are aligned to provide easy access for soldering up to size 22 AWG wires

SINGLE ROW Series 824



DOUBLE ROW Series 826



ORDERING INFORMATION

Single Row Series 824

824-22-0XX-00-001000

Specify number of contacts 01-64

Double Row Series 826

826-22-0XX-00-001000

Specify number of contacts 04-72

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

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

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

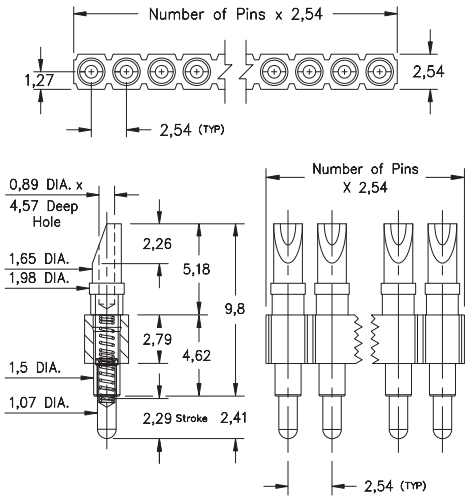
SPRING-LOADED CONNECTORS

SERIES 824 & 826 • 2,54 GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

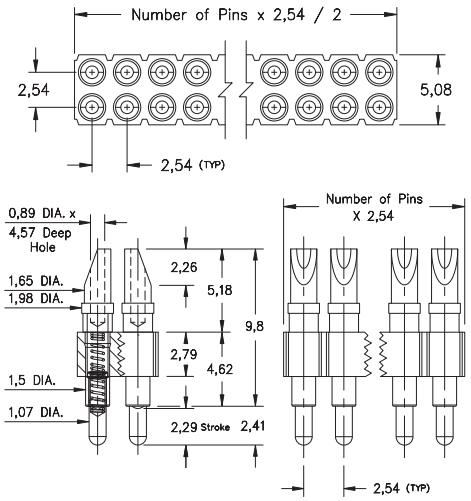


- Modular contacts for use on 2,54 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic
- Both 824 & 826 series strips have spring pins with wire termination soldercups. The soldercups are aligned to provide easy access for soldering up to size 24 AWG wires

SINGLE ROW Series 824



DOUBLE ROW Series 826



ORDERING INFORMATION

Single Row Series 824

824-22-0XX-00-005000

Specify number of contacts 01-64

Double Row Series 826

826-22-0XX-00-005000

Specify number of contacts 02-72

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (1,14): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

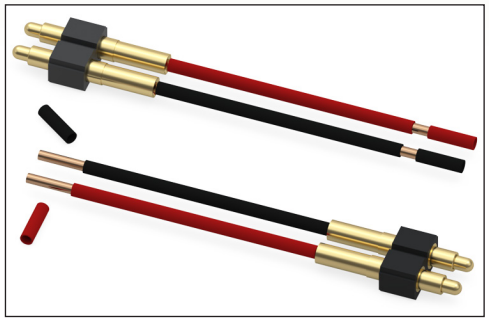
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2
2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

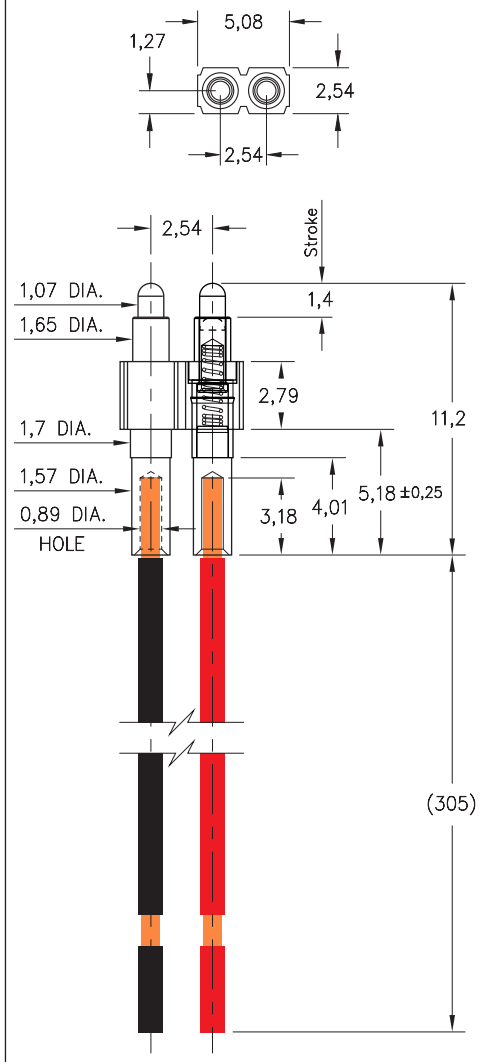
SPRING-LOADED CONNECTORS

SERIES 867 • 2,54 GRID WIRED CRIMP SPRING-LOADED CONNECTOR • SINGLE ROW STRIPS



- 867 series are spring loaded crimp connectors pre-wired with 24 AWG stranded conductors; one red, one black. The wire is per UL1007 with PVC insulation and 7/32 stranding. The ends are stripped to a length of 3,56 with slug on
- The connector design maintains the pins in the housing when pull force is applied to the wires
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic, pin spacing is 2,54

SINGLE ROW Series 867



ORDERING INFORMATION

Single Row Wired Crimp Series 867
867-22-002-70-501010

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles
Wire retention: 35.6 Newtons minimum

Electrical:

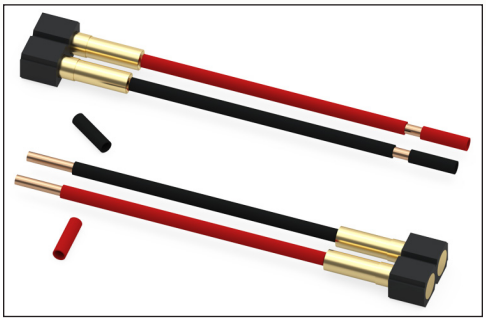
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

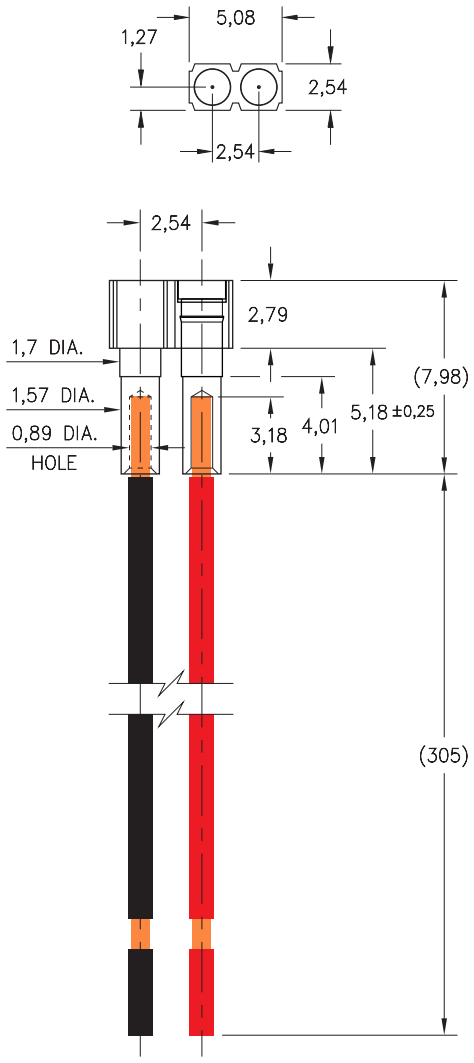
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 867 • 2,54 GRID WIRED CRIMP TARGET CONNECTOR • SINGLE ROW STRIPS



SINGLE ROW Series 867



- 867 series are target crimp connectors pre-wired with 24 AWG stranded conductors; one red, one black. The wire is per UL1007 with PVC insulation and 7/32 stranding. The ends are stripped to a length of 3,56 with slug on
- The connector design maintains the pins in the housing when pull force is applied to the wires
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. This series is offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Insulators are high temperature thermoplastic, pin spacing is 2,54

ORDERING INFORMATION

Single Row Wired Crimp Series 867
867-10-002-70-502010

Technical Specifications

Materials:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard
Pin Finish: 0,25µm Gold over Nickel
Insulator: High temperature Nylon 46, rated UL94 V-0

Mechanical:

Wire retention: 35.6 Newtons minimum

Electrical:

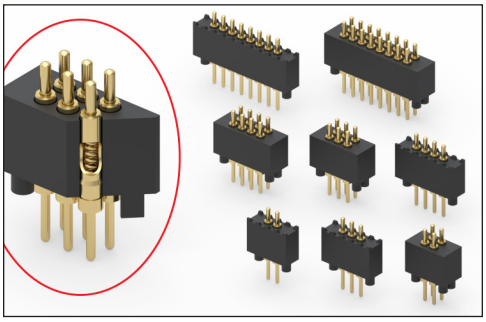
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

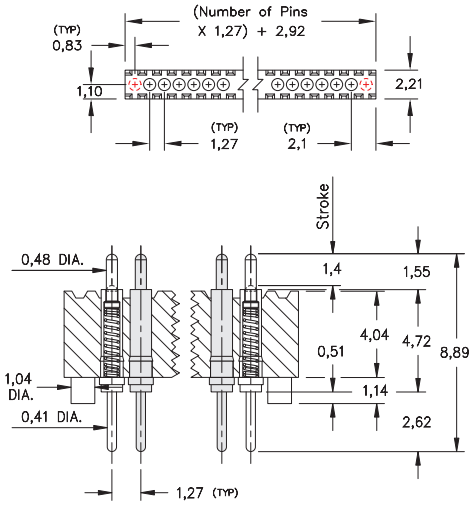
SPRING-LOADED CONNECTORS

SERIES 854 & 855 • 1,27 GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

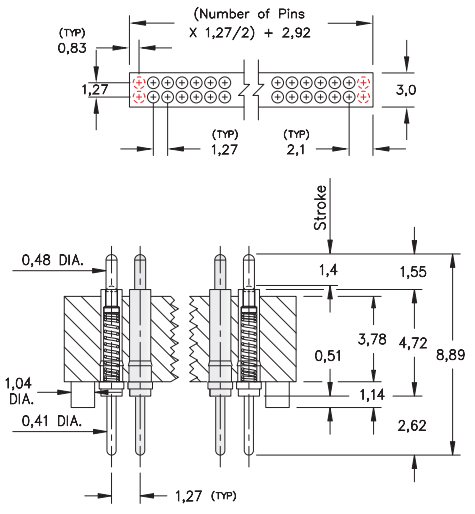


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 854 & 855 series contact strips are designed for manual placement into Ø 0,64±0,076 plated through-holes in the circuit board prior to hand, wave or reflow soldering

SINGLE ROW Series 854



DOUBLE ROW Series 855



ORDERING INFORMATION

Single Row Series 854

854-22-0XX-10-001101

Specify number of contacts 02-20

Double Row Series 855

855-22-0XX-10-001101

Specify number of contacts 04-40

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

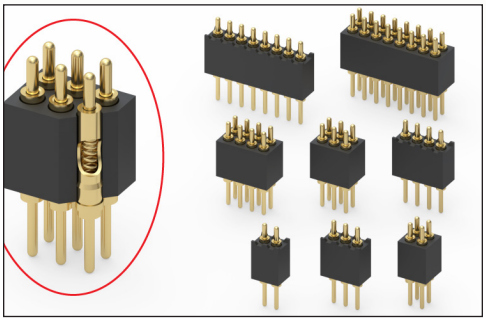
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2
2011/65/EU

MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

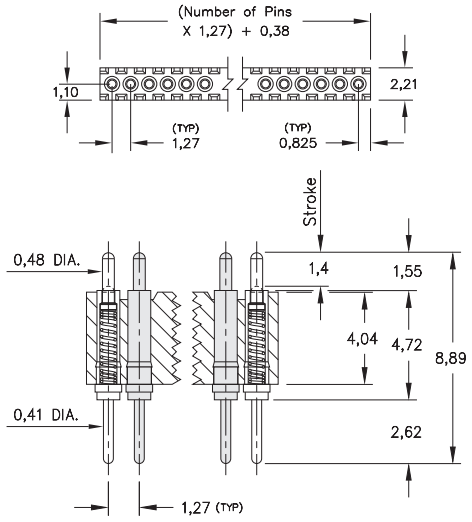
SPRING-LOADED CONNECTORS

SERIES 854 & 855 • 1,27 GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS WITHOUT STANDOFFS

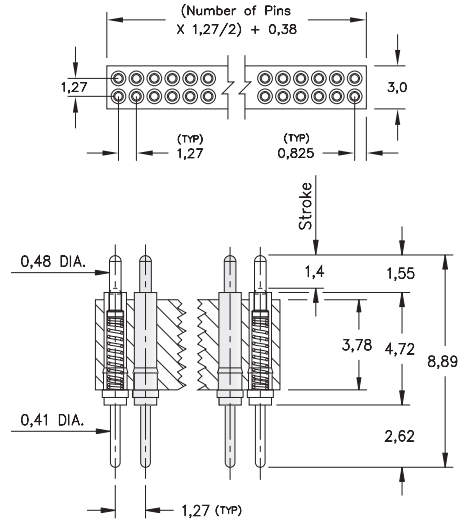


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 854 & 855 series contact strips are designed for manual placement into Ø 0,64±0,076 plated through-holes in the circuit board prior to hand, wave or reflow soldering

SINGLE ROW Series 854



DOUBLE ROW Series 855



ORDERING INFORMATION

Single Row Series 854

854-22-0XX-10-002101

Specify number of contacts 02-20

Double Row Series 855

855-22-0XX-10-002101

Specify number of contacts 04-40

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

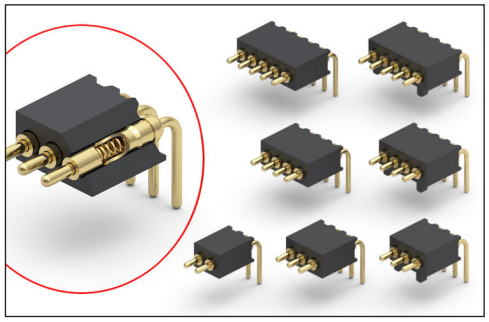
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

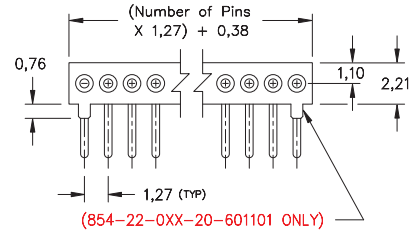
MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

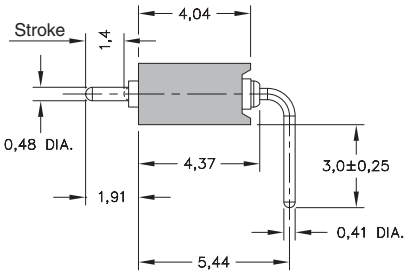
SPRING-LOADED CONNECTORS

SERIES 854 • 1,27 GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS

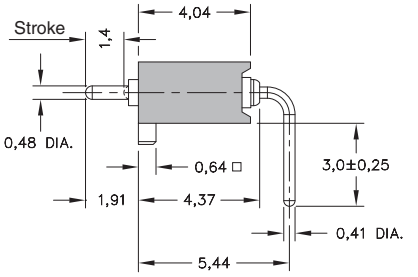


SINGLE ROW Series 854



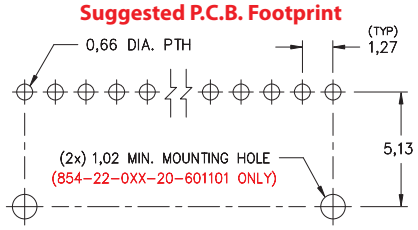


854 Series without Mounting Pegs



854 Series with Mounting Pegs

Suggested P.C.B. Footprint



- Modular contacts for use on 1,27 grid. Supplied in single row strips with or without mounting pegs
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow soldering processes
- 854 series contact strips are designed for through-hole mounting in the circuit board

ORDERING INFORMATION

Single Row Series 854

854-22-0XX-20-001101

Specify number of contacts 01-20

Single Row with Mounting Pegs Series 854

854-22-0XX-20-601101

Specify number of contacts 01-20

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

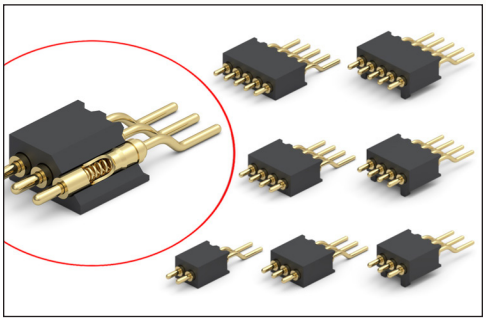
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

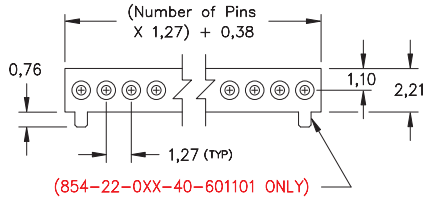
SPRING-LOADED CONNECTORS

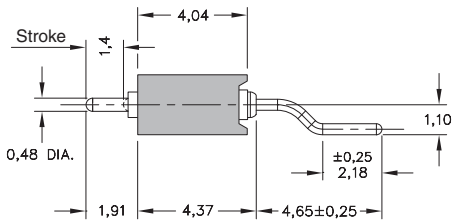
SERIES 854 • 1,27 GRID Z-BEND SURFACE MOUNT • SINGLE ROW STRIPS



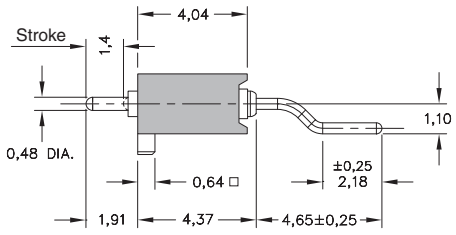
- Modular contacts for use on 1,27 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount soldering processes
- 854 series contact strips are designed for SMT termination onto printed circuit boards

SINGLE ROW Series 854





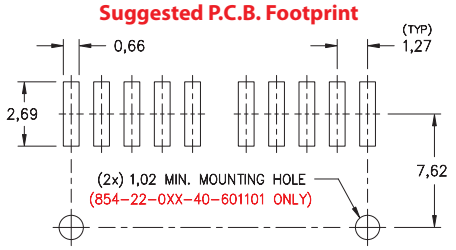
854 Series without Mounting Pegs



854 Series with Mounting Pegs

Coplanarity 0,13. For pin counts >20 positions, consult Technical Support.

Suggested P.C.B. Footprint



ORDERING INFORMATION

Series 854 without Mounting Pegs (Bulk Packaged)
854-22-0XX-40-001101 **Specify number of contacts** 01-20
Series 854 with Mounting Pegs (Bulk Packaged)
854-22-0XX-40-601101 **Specify number of contacts** 01-20
Series 854 with Mounting Pegs (Tape & Reel Packaged)
854-22-0XX-40-601191 **Specify number of contacts** 02 & 06

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

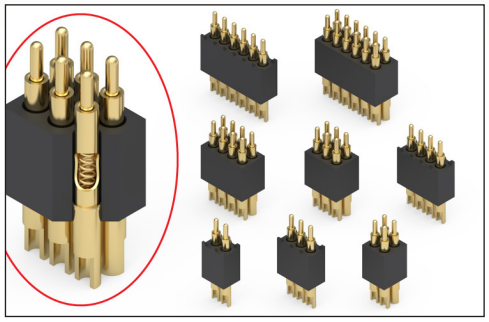
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

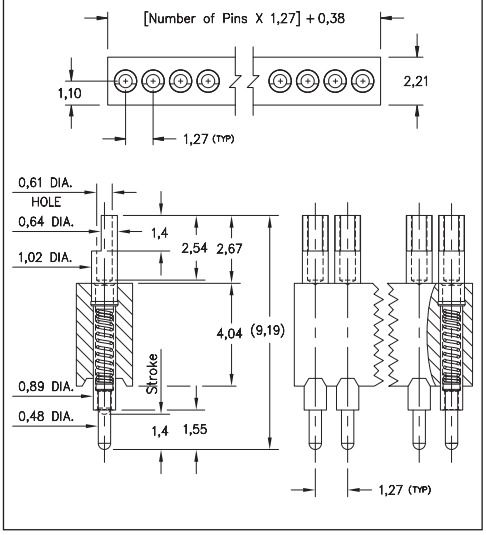
SPRING-LOADED CONNECTORS

SERIES 854 & 855 • 1,27 GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

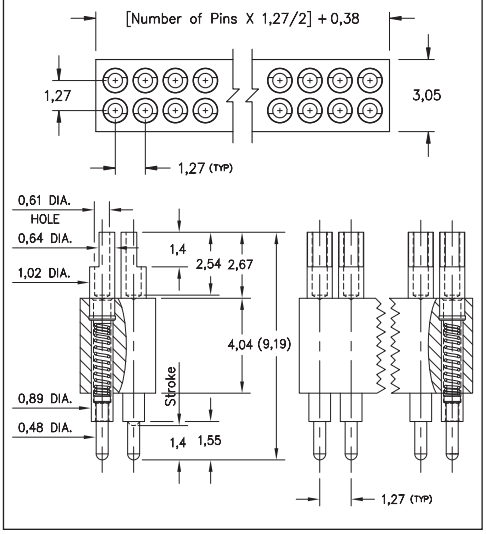


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 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

SINGLE ROW Series 854



DOUBLE ROW Series 855



ORDERING INFORMATION

Single Row Series 854

854-22-0XX-10-003101

Specify number of contacts 01-50

Double Row Series 855

855-22-0XX-10-003101

Specify number of contacts 02-100

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

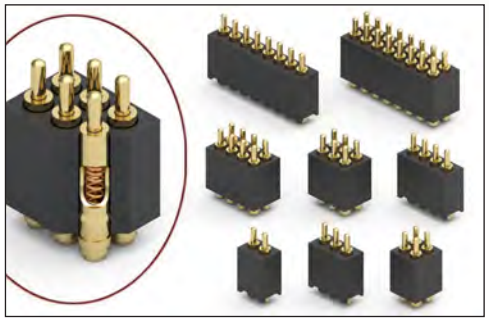
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2
2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

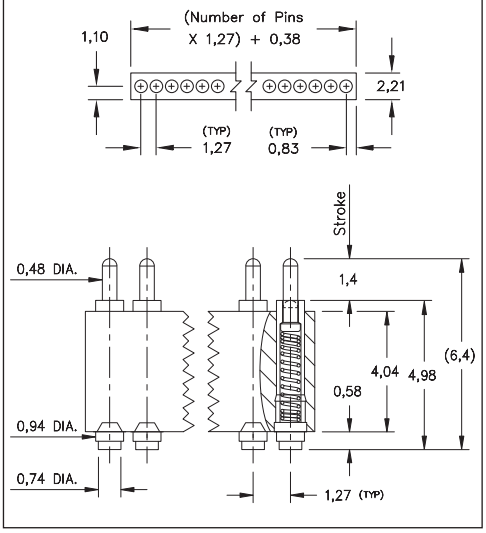
SPRING-LOADED CONNECTORS

SERIES 854 & 855 • 1,27 GRID SURFACE MOUNT, HIGH DENSITY • SINGLE AND DOUBLE ROW STRIPS

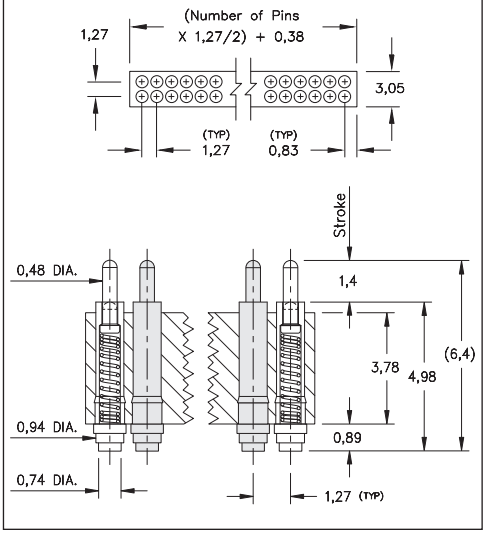


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 854 & 855 series contact strips are designed for manual placement onto 1,02 Ø solder pads
- 855 series is also available on tape & reel packaging, see page 19.1

SINGLE ROW Series 854



DOUBLE ROW Series 855



ORDERING INFORMATION

Single Row Series 854

854-22-0XX-30-001101

Specify number of contacts 02-20

Double Row Series 855

855-22-0XX-30-001101

Specify number of contacts 04-40

For 855 Tape & Reel packaging, see page 19.1

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

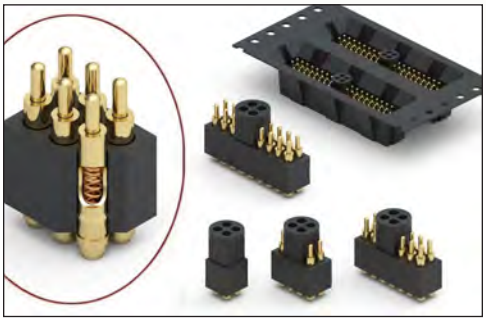
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2
2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

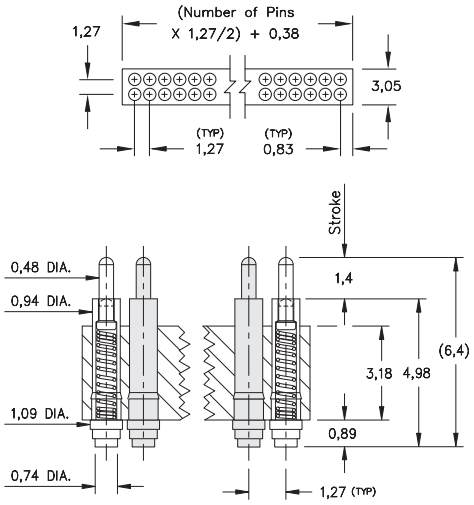
SPRING-LOADED CONNECTORS

SERIES 855 • 1,27 GRID SURFACE MOUNT, HIGH DENSITY • DOUBLE ROW STRIPS ON TAPE & REEL

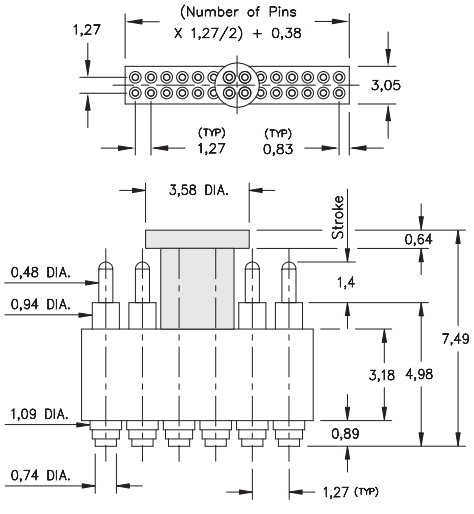


- Modular contacts for use on 1,27 grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 855 series is available on carrier tape for automated pick and place assembly. Tape and Reel packaging per EIA-481. For details contact Mill-Max Technical support

DOUBLE ROW Series 855



Series 855 w/ removable pick n place cap



ORDERING INFORMATION

Double Row Series 855

855-22-0XX-30-002191

Specify number or pins
04-40

Tape & reel packaged = 191
660 parts per 330mm reel

Positions: 6, 10, 14, 18, 22, 26, 30, 34, 38 the Pick n Place Vacuum Cap will be offset from center by 0,64mm

Positions: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40 the Pick n Place Vacuum Cap will be centered

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 100,000 cycles

Electrical:

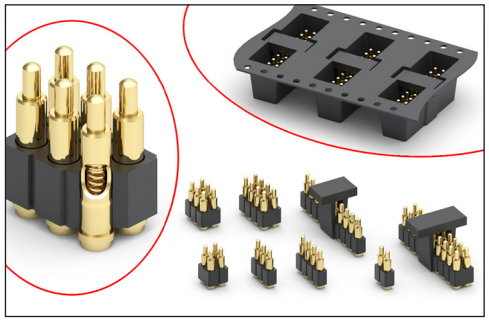
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2
2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

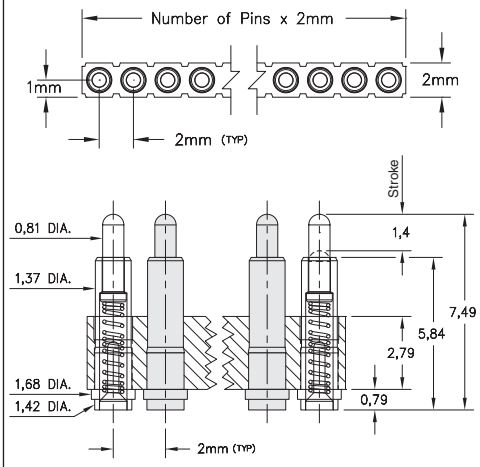
SPRING-LOADED CONNECTORS

SERIES 836 & 838 • 2mm GRID SURFACE MOUNT • SINGLE AND DOUBLE ROW STRIPS



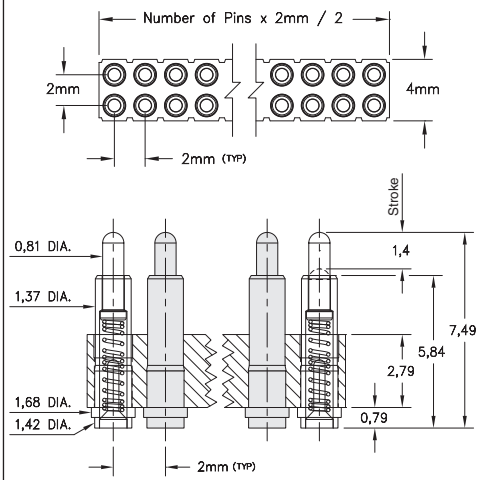
- Modular contacts for use on 2mm grid, available in single and double row contact strips with rated travel of 0,7 and max. stroke of 1,4
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for SMT soldering processes
- Both 836 & 838 series, are available on 32mm wide carrier tape and fitted with vacuum pick-up clips for automated pick and place assembly. Tape and Reel packaging per EIA-481
- 836 & 838 series contact strips are designed for manual or automatic placement onto 1,68 Ø solder pads

SINGLE ROW Series 836



Coplanarity 0,13. For Pin Counts >10 positions consult Technical Support

DOUBLE ROW Series 838



Coplanarity 0,13. For Pin Counts >20 positions consult Technical Support

ORDERING INFORMATION

Series 836 (Bulk Packaged)

836-22-0XX-30-001101

Specify number of contacts 02-10

Series 836 (Tape & Reel Packaged, 400 parts per 330mm Reel)

836-22-0XX-30-001191

Specify number of contacts 02-10

Series 838 (Bulk Packaged)

838-22-0XX-30-001101

Specify number of contacts 04-20

Series 838 (Tape & Reel Packaged, 400 parts per 330mm Reel)

838-22-0XX-30-001191

Specify number of contacts 04-20

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µmgold over 2,54µm nickel
Spring: Stainless Steel-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

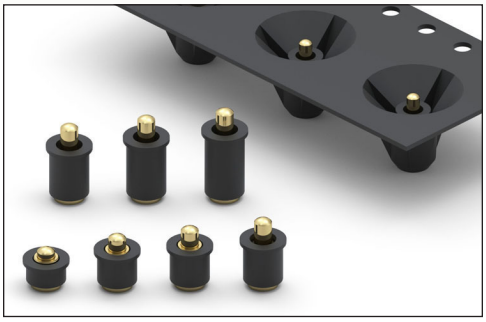
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

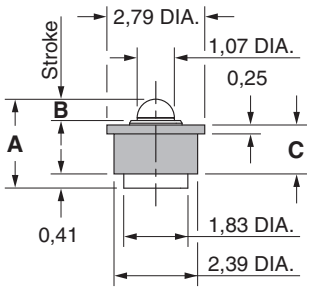
SPRING-LOADED CONNECTORS

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

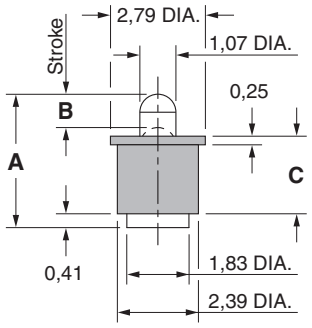


- Discrete insulated spring-loaded pins; available in seven heights from 2,54 to 5,99, with rated travel from 0,3 to 0,7
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High 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

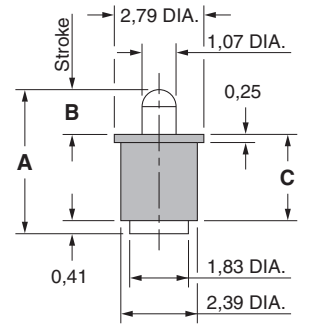
Series 807 (Contact Style 0)



Series 807 (Contact Style 1 & 2)



Series 807 (Contact Style 3-6)



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)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Quantity per Reel
0	2,54	0,3	0,51-0,61	1,39	2,620
1	3,48	0,5	0,76-0,99	2,08	1,750
2	3,94	0,5	0,89-0,99	2,29	1,750
3	4,50	0,7	1,14-1,4	2,69	1,055
4	5,0	0,7	1,14-1,4	3,2	780
5	5,51	0,7	1,14-1,4	3,71	780
6	5,99	0,7	1,14-1,4	4,19	780

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 0): Stainless Steel-plated 0,25µm gold
Spring (Contact style 1-6): Beryllium copper-plated 0,25µm 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: Up to 1,000,000 cycles

Electrical:

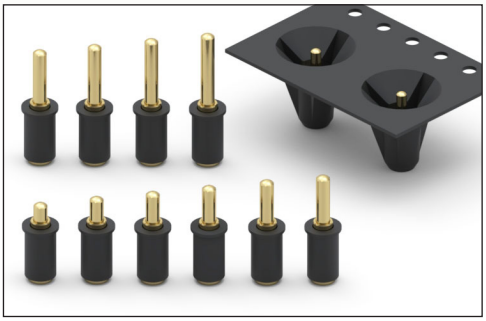
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

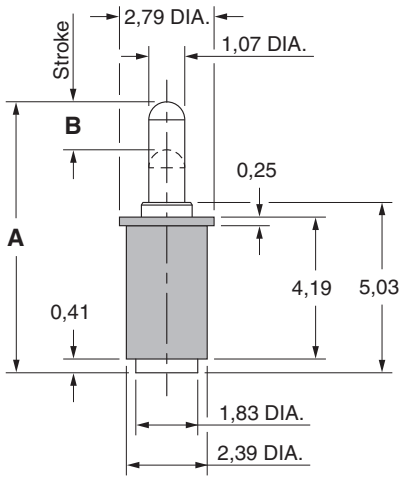
SPRING-LOADED CONNECTORS

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

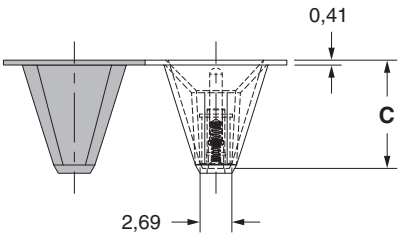


- Discrete insulated spring-loaded pins; available in ten heights from 6,48 to 10,92, with rated travel of 0,7
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature 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

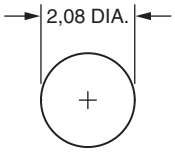
Series 807 (Contact Style 0-9)



Series 807 (Tape Pocket Depth)



Series 807 (Suggested footprint layout)



ORDERING INFORMATION

Series 807 (Bulk Packaged)

807-22-001-30-01X101

Specify contact style 0-9

Series 807 (Tape & Reel Packaged)

807-22-001-30-01X191

Specify contact style 0-9

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Tape Depth (C)	Quantity per Reel
0	6,48	0,7	1,14-1,4	7,24	750
1	6,99	0,7	1,14-1,4	7,24	750
2	7,49	0,7	1,14-1,4	8,28	600
3	8,0	0,7	1,14-1,4	8,28	600
4	8,51	0,7	1,14-1,4	9,17	550
5	8,89	0,7	1,14-1,4	9,17	550
6	9,4	0,7	1,14-1,4	10,19	475
7	9,91	0,7	1,14-1,4	10,19	475
8	10,41	0,7	1,14-1,4	11,2	430
9	10,92	0,7	1,14-1,4	11,2	430

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 0-9): Beryllium copper-plated 0,25µm 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: Up to 1,000,000 cycles

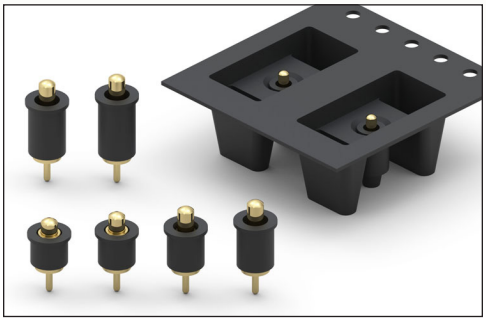
Electrical:

Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

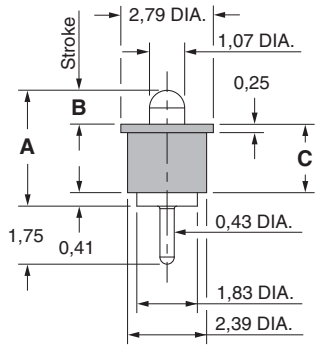
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

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

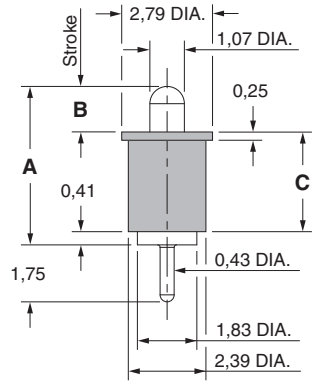


- Discrete insulated spring-loaded pins; available in six heights from 3,48 to 6,0, with rated travel of 0,5 & 0,7
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature 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

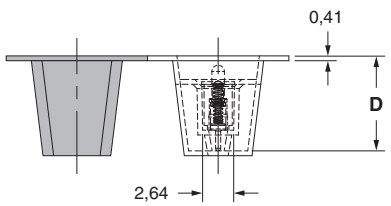
Series 807 (Contact Style 1 & 2)



Series 807 (Contact Style 3, 4, 5 & 6)



Series 807 (Tape Pocket Depth)



ORDERING INFORMATION

Series 807 (Bulk Packaged)

807-22-001-10-00X101

Specify contact style 1-6

Series 807 (Tape & Reel Packaged)

807-22-001-10-00X191

Specify contact style 1-6

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	3,48	0,5	0,76-1,0	2,08	6,0	880
2	3,94	0,5	0,89-1,0	2,29	6,0	880
3	4,5	0,7	1,14-1,4	2,69	7,07	745
4	5,0	0,7	1,14-1,4	3,2	7,07	745
5	5,51	0,7	1,14-1,4	3,71	8,06	640
6	6,0	0,7	1,14-1,4	4,19	8,06	640

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 1-6): Beryllium copper-plated 0,25µm 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: Up to 1,000,000 cycles

Electrical:

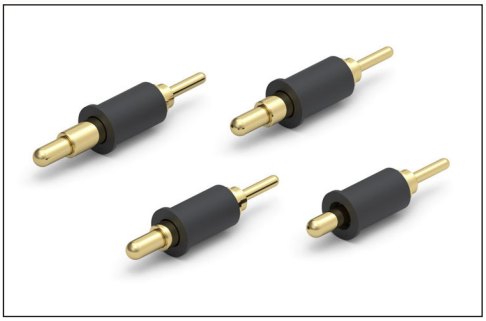
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

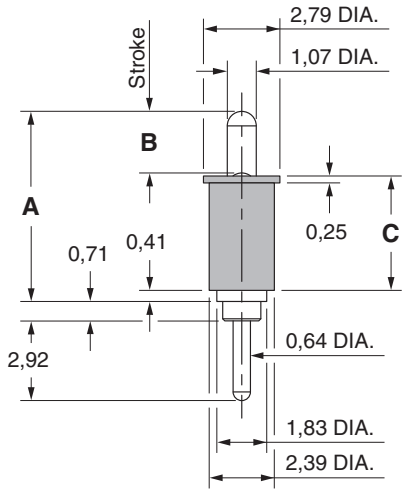
SPRING-LOADED CONNECTORS

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

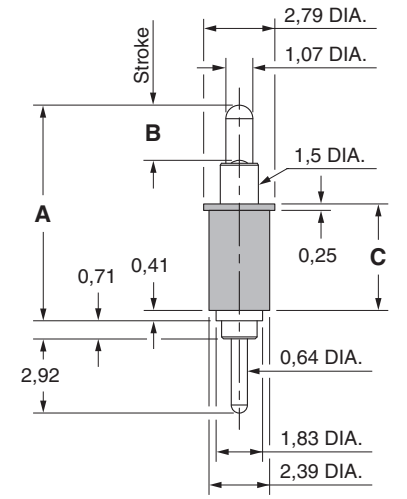


- Discrete insulated spring-loaded pins; available in four heights from 6,96 to 9,25, with rated travel of 1,14
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most soldering processes
- 807 series, contact styles 0 through 3, are packaged in bulk. See below for ordering information

Series 807 (Contact Style 0)



Series 807 (Contact Style 1 - 3)



ORDERING INFORMATION

Series 807 (Bulk Packaged)

807-22-001-10-02X101

Specify contact style 0-3

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)
0	6,96	1,14	2,16-2,29	4,19
1	7,72	1,14	2,16-2,29	4,19
2	8,48	1,14	2,16-2,29	4,19
3	9,25	1,14	2,16-2,29	4,19

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 0-3): Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A) (Contact style 0-3): 25 grams
Spring force @ mid stroke (B/2) (Contact style 0-3): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

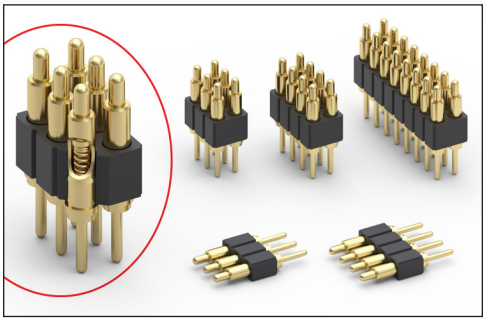
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

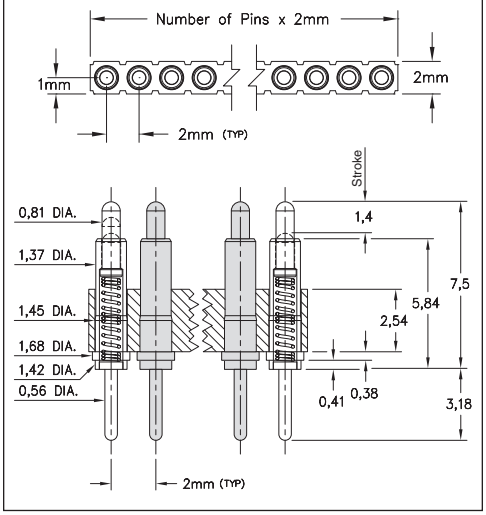
SPRING-LOADED CONNECTORS

SERIES 836 & 838 • 2MM GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

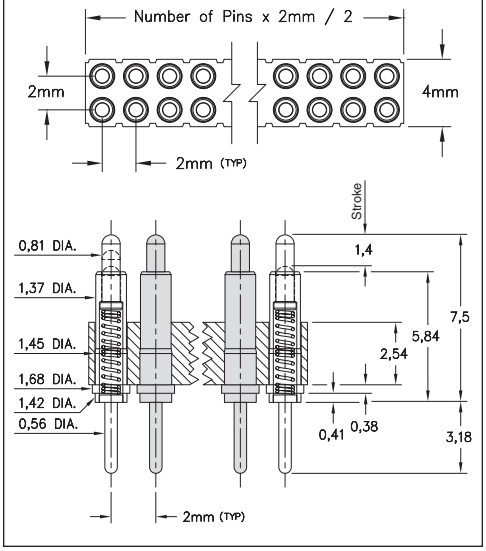


- Modular contacts for use on 2mm grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a 0,7 mid. stroke and a 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 836 & 838 series contact strips are designed for manual placement into Ø 0,84±0,076 plated through-holes in the circuit board prior to soldering

SINGLE ROW Series 836



DOUBLE ROW Series 838



ORDERING INFORMATION

Single Row Series 836

836-22-0XX-10-001101

Specify number of contacts 01-50

Double Row Series 838

838-22-XXX-10-001101

Specify number of contacts 04-100

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams
Spring force @ mid stroke (0,7): 60 grams
Durability: Up to 1,000,000 cycles

Electrical:

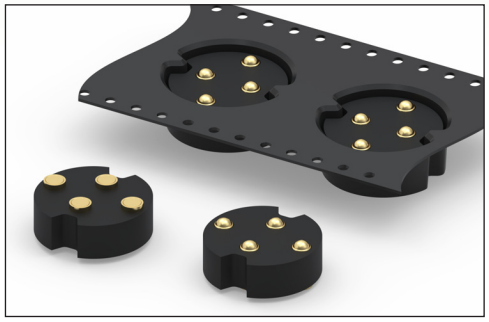
Voltage rating: 100Vrms/150Vdc
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

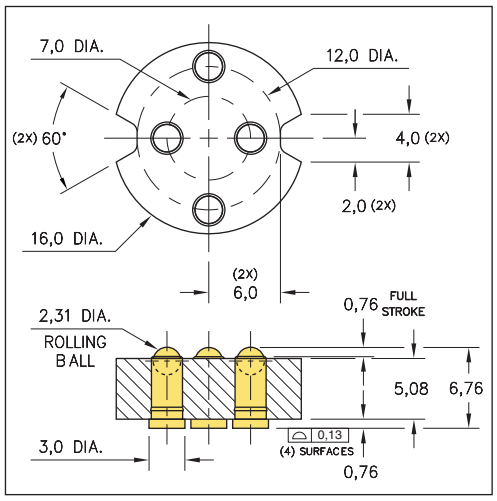
RoHS-2 2011/65/EU

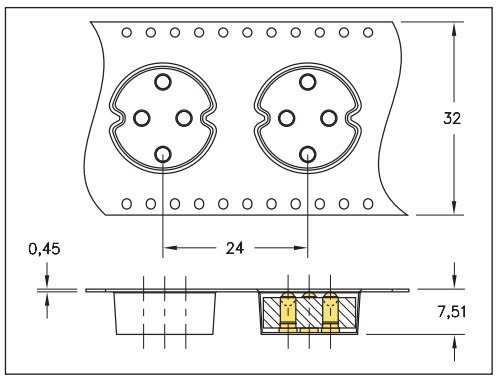
MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

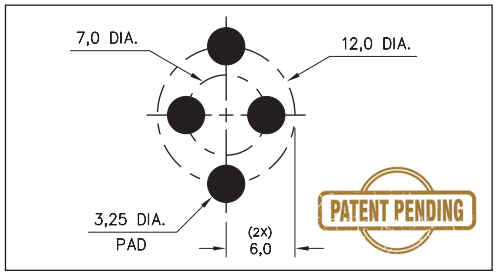
SPRING-LOADED CONNECTORS

SERIES 945 • OMNIBALL® CIRCULAR SPRING-LOADED CONNECTOR • SURFACE MOUNT









- These connectors utilize the unique Omniball® spring loaded contact (patent pending), a rolling ball interface which enables mating surfaces to slide into contact with each other in blind mate or "twist & lock" applications. The Omniball® contact pins are designed to compress and roll, supporting lateral and rotational connections, in either static or dynamic applications, while providing optimal electrical, mechanical and structural reliability
- Precision machined, gold-plated components assure durability of 100,000 – 1,000,000 compression and rolling cycles
- Pistons have a 0,38 mid. stroke and a 0,76 max. stroke
- Low resistance, high current contacts are rated at 3.5 amps continuous, 5 amps peak
- Machined Fr-4 Epoxy insulators are suitable for surface mount soldering processes
- 945 Series surface mount connectors are offered in bulk packaging for manual placment and on tape & reel for automatic pick & place assembly. The recommended pad size is 3,25Ø minimum

ORDERING INFORMATION

Series 945 (Tube Packaged)
945-22-204-30-360101
Series 945 (Tape & Reel Packaged)
945-22-204-30-360191

Technical Specifications for 945 Series

Materials:

Contact ball & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Beryllium copper-plated 0,25µm gold
Insulator: Machined Fr-4 Epoxy, rated UL94 V-0

Mechanical:

Spring force @ initial height: 30 grams
Spring force @ mid stroke (0,38): 55 grams
Durability: 100,000 to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc
Current rating: 3.5A (continous), 5A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.
Capacitance: 1pF max.

RoHS-2 2011/65/EU

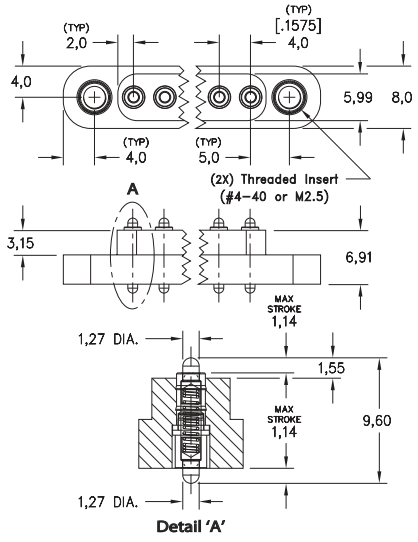
MILL-MAX® Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

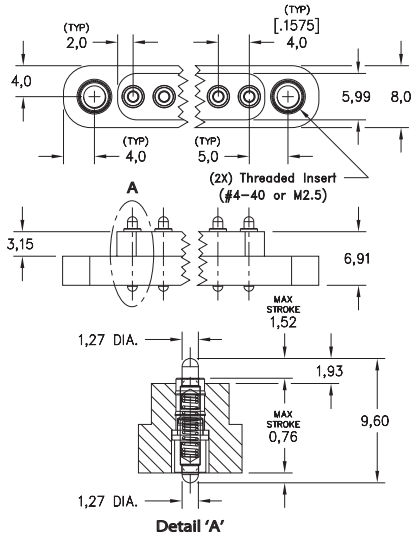
SERIES 858 • 4MM GRID RUGGED DUAL PLUNGER SOLDERLESS CONNECTOR



Series 858-22-00X-80-0X1101



Series 858-22-00X-80-0X2101



- Rugged Modular contacts for use on 4mm grid, supplied in 2 - 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability (Rated @ Mid-Stroke)
- Low resistance, high current contacts are rated at 9 amps @ 10°C Temperature rise
- Designed for solderless, compression connections between PCB's and/or devices
- Mounting tabs on the housing provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- Series 858-22-00X-80-0X1101 connectors are designed with dual action plungers. Each plunger is capable of achieving a 1,14 max. travel individually or simultaneously. Maximum combined stroke of both plungers is 2,29 per spring pin
- Series 858-22-00X-80-0X2101 connectors are designed with dual action plungers. One plunger is capable of achieving a 0,76 max. travel and the other is capable of achieving a 1,52 max. travel. Plungers can achieve their max. travel individually or simultaneously. Maximum combined stroke of both plungers is 2,29 per spring pin
- See Catalog page 19.74 for assemblies with Alignment pegs

ORDERING INFORMATION

Series 858 (1,14 travel each Plunger)

858-22-00X-80-0X1101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (0,76 &1,52 travel Plungers)

858-22-00X-80-0X2101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 5,08µm gold over 2,54µm nickel
Spring: Stainless Steel 302
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 35 grams
Spring force @ mid stroke: 120 grams
Durability: Up to 1,000,000 cycles (Rated @ Mid-Stroke)

Electrical:

Current rating: 9A @ 10° C Temp. rise above ambient (20°C)
Contact resistance: 20mΩ max. (Rated @ Mid-Stroke)
Insulation resistance: 10,000MΩ min.

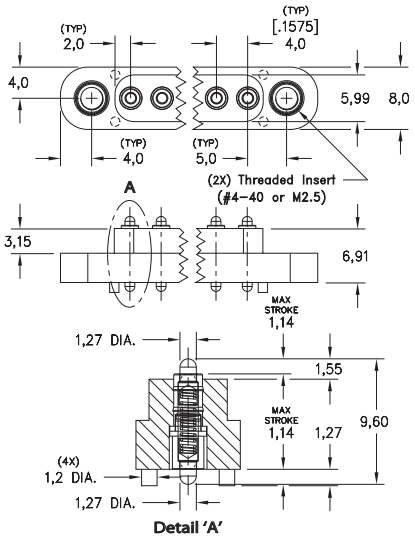
RoHS-2
2011/65/EU

MILL-MAX Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

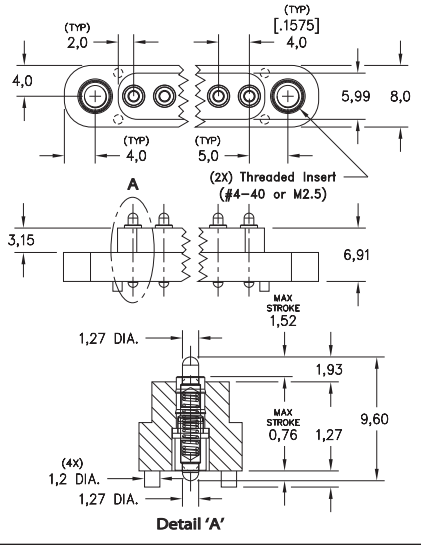
SERIES 858 • 4MM GRID RUGGED DUAL PLUNGER SOLDERLESS CONNECTOR WITH ALIGNMENT PEGS



Series 858-22-00X-80-6X1101



Series 858-22-00X-80-6X2101



- Rugged Modular contacts for use on 4mm grid, supplied in 2 - 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability (Rated @ Mid-Stroke)
- Low resistance, high current contacts are rated at 9 amps @ 10°C Temperature rise
- Designed for solderless, compression connections between PCB's and/or devices
- Mounting tabs on the housing provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- The housing has alignment pegs included to aid in positioning of connector during assembly
- Series 858-22-00X-80-6X1101 connectors are designed with dual action plungers. Each plunger is capable of achieving a 1,14 max. travel individually or simultaneously. Maximum combined stroke of both plungers is 2,29 per spring pin
- Series 858-22-00X-80-6X2101 connectors are designed with dual action plungers. One plunger is capable of achieving a 0,76 max. travel and the other is capable of achieving a 1,52 max. travel. Plungers can achieve their max. travel individually or simultaneously. Maximum combined stroke of both plungers is 2,29 per spring pin
- See Catalog page 19.73 for assemblies without Alignment pegs

ORDERING INFORMATION

Series 858 (1,14 travel each Plunger)

858-22-00X-80-6X1101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (0,76 &1,52 travel Plungers)

858-22-00X-80-6X2101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 5,08µm gold over 2,54µm nickel
Spring: Stainless Steel 302
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 35 grams
Spring force @ mid stroke: 120 grams
Durability: Up to 1,000,000 cycles (Rated @ Mid-Stroke)

Electrical:

Current rating: 9A @ 10° C Temp. rise above ambient (20°C)
Contact resistance: 20mΩ max. (Rated @ Mid-Stroke)
Insulation resistance: 10,000MΩ min.

RoHS-2 2011/65/EU

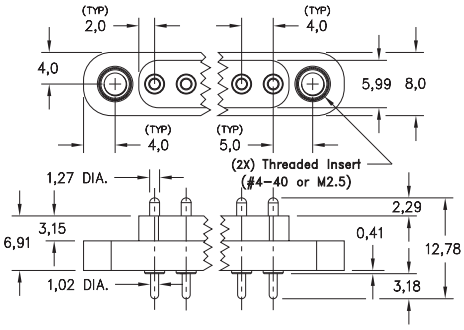
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

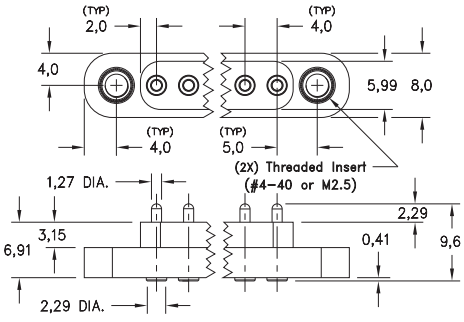
SERIES 858 • 4MM GRID RUGGED CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT



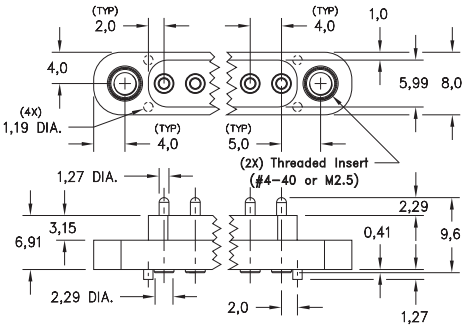
Series 858-22-00X-10-0X1101



Series 858-22-00X-30-0X1101



Series 858-22-00X-30-6X1101



- Rugged Modular contacts for use on 4mm grid, supplied in 2 - 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability. Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Mounting tabs provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- Low resistance, high current contacts are rated at 9 amps @ 10°C Temperature rise
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Series 858-22-00X-10-0X1101 connectors are designed for manual placement into 1,32±0,076 Ø plated through-holes in the circuit board prior to soldering
- Series 858-22-00X-30-0X1101 and 858-22-00X-30-6X1101 connectors are designed for manual placement onto 2,54 Ø solder pads

ORDERING INFORMATION

Series 858 (Through-Hole Mount)

858-22-00X-10-0X1101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (Surface Mount)

858-22-00X-30-0X1101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (Surface Mount with Alignment Pins)

858-22-00X-30-6X1101

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 5,08µm gold over 2,54µm nickel
Spring: Stainless Steel 302
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 35 grams
Spring force @ mid stroke: 120 grams
Durability: Up to 1,000,000 cycles

Electrical:

Current rating: 9A @ 10° C Temp. rise above ambient (20°C)
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.

RoHS-2 2011/65/EU

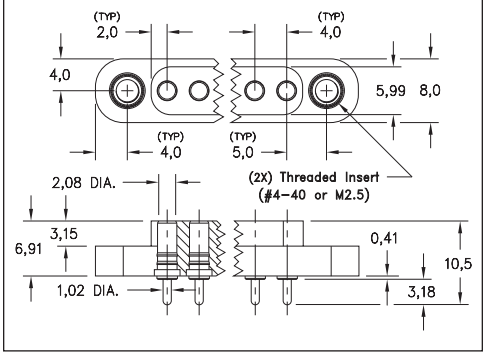
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

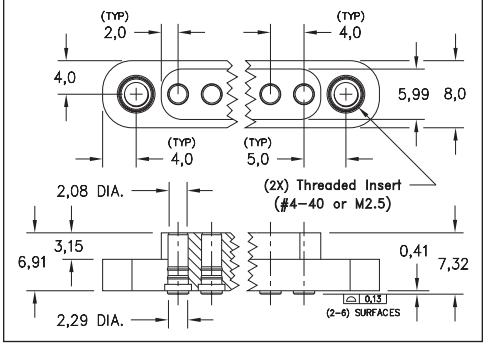
SERIES 858 • 4MM GRID RUGGED FLAT FACE TARGET CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT



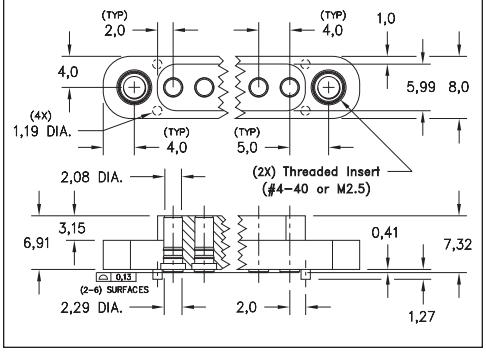
Series 858-10-00X-10-0X1000



Series 858-10-00X-30-0X1000



Series 858-10-00X-30-6X1000



- Rugged Target Connectors for use on 4mm grid, supplied in 2 - 6 position connectors
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our 858-22-00X-X0-XX1101 series spring-loaded connectors
- Target connectors use MM #1959-0 and #1969-0 pins. See page 223.5 for details
- Mounting tabs provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- High temp. thermoplastic insulators are suitable for wave and reflow soldering processes
- Series 858-10-00X-10-0X1000 connectors are designed for manual placement into 1,32±0,076 Ø plated through-holes in the circuit board prior to soldering
- Series 858-10-00X-30-0X1000 and 858-10-00X-30-6X1000 connectors are designed for manual placement onto 2,54 Ø minimum solder pads

ORDERING INFORMATION

Series 858 (Through-Hole Mount)

858-10-00X-10-0X1000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (Surface Mount)

858-10-00X-30-0X1000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (Surface Mount with Alignment Pins)

858-10-00X-30-6X1000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

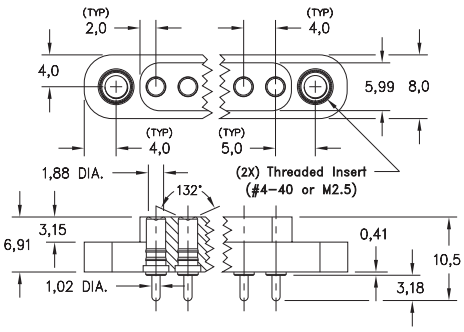
SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25 µm Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

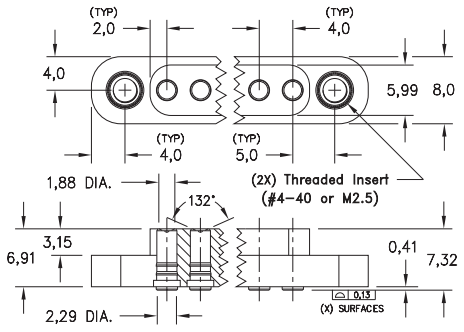
SERIES 858 • 4MM GRID RUGGED CONCAVE FACE TARGET CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT



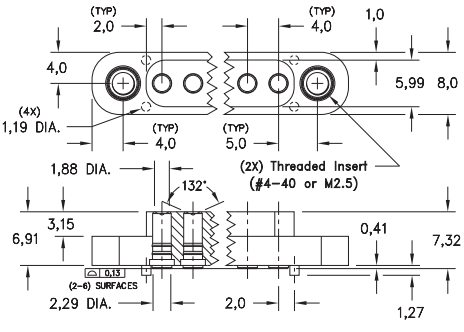
Series 858-10-00X-10-0X2000



Series 858-10-00X-30-0X2000



Series 858-10-00X-30-6X2000



- Rugged Target Connectors for use on 4mm grid, supplied in 2 - 6 position connectors
- Target Connectors provide an excellent gold-plated conductive mating surface for spring -loaded connectors. These series are offered with a concave face providing additional surface area for mating with our 858-22-00X-X0-XX1101 series spring-loaded connectors
- Target connectors use MM #1959-1 and #1969-1 pins. See page 223.5 for details
- Mounting tabs provide a means for secure attachment to the PCB and may be specified with or without threaded inserts
- High temp. thermoplastic insulators are suitable for wave and reflow soldering processes
- Series 858-10-00X-10-0X2000 connectors are designed for manual placement into 1,32±0,076 Ø plated through-holes in the circuit board prior to soldering
- Series 858-10-00X-30-0X2000 and 858-10-00X-30-6X2000 connectors are designed for manual placement onto 2,54 Ø minimum solder pads

ORDERING INFORMATION

Series 858 (Through-Hole Mount)

858-10-00X-10-0X2000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (Surface Mount)

858-10-00X-30-0X2000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 858 (Surface Mount with Alignment Pins)

858-10-00X-30-6X2000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

RoHS-2 2011/65/EU

XX=Plating Code See Below

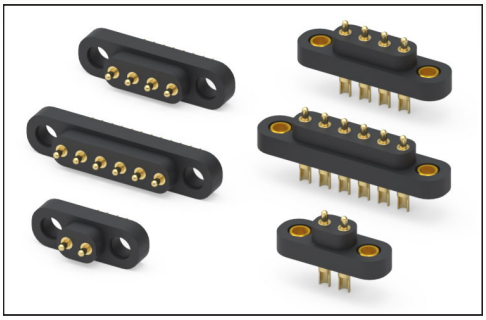
For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25 µm Au			

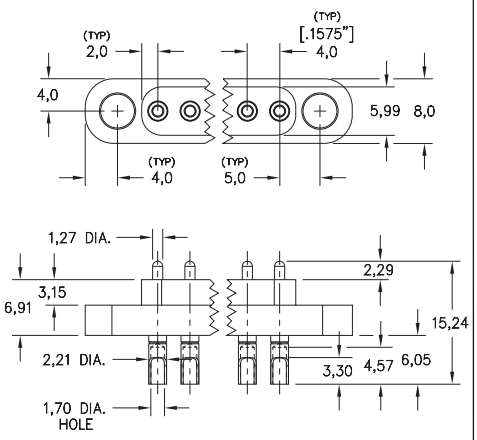
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

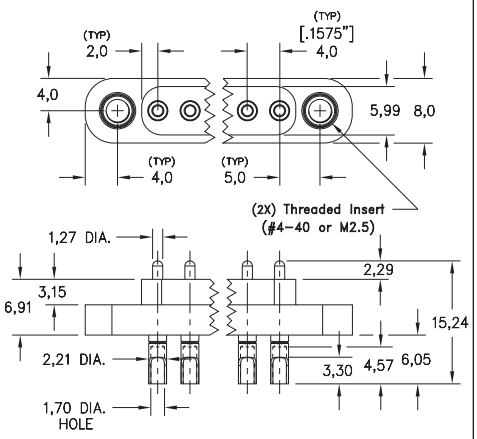
SERIES 868 • 4MM GRID RUGGED CONNECTORS • SOLDERCUP TERMINATION



Series 868-22-00X-00-001101



Series 868-22-00X-00-011101



- Rugged Modular contacts for use on 4mm grid, supplied in 2 - 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability. Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Mounting tabs provide a means for secure attachment to PCB's, cable assemblies or other housings and may be specified with or without threaded inserts.
- High temperature thermoplastic insulators are suitable for most automated and manual soldering processes
- Series 868-22-00X-00-0X101 connectors are ideal for use with Mill-Max 858 and 868 series SMT, through hole or wire termination target connectors
- Solder cup termination accommodates up to 16 AWG wire
- Series 868-22-00X-00-0X101 use 0868-0 spring-loaded pins. See page 23.1 for details

ORDERING INFORMATION

Series 868 (Soldercup Termination)

868-22-00X-00-001101

Specify number of pins 2-6

No Threaded inserts

Series 868 (Soldercup Termination)

868-22-00X-00-0X1101

Specify number of pins 2-6

(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring: Stainless Steel 302 plated 0,25µm gold over nickel
Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 35 grams
Spring force @ mid stroke: 120 grams
Durability: Up to 1,000,000 cycles

Electrical:

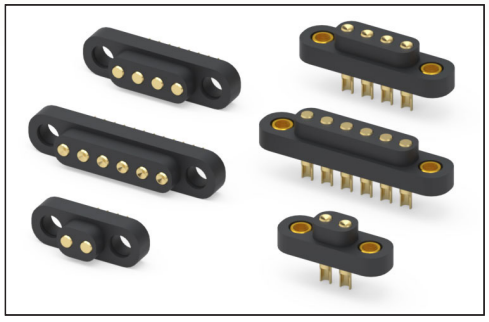
Current rating: 9A @ 10° C Temp. rise above ambient (20°C)
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.

RoHS-2
2011/65/EU

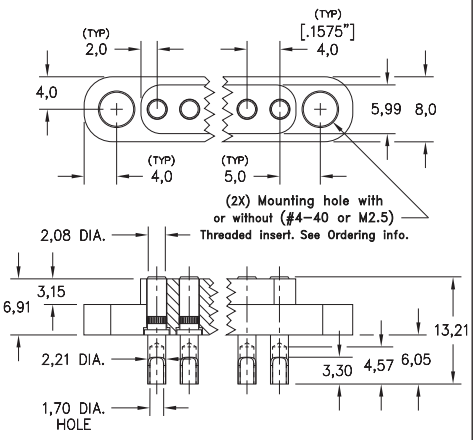
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

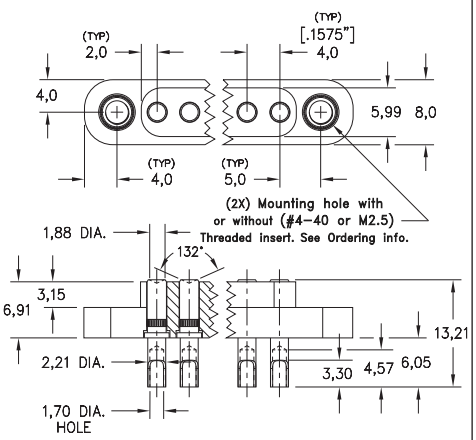
SERIES 868 • 4MM GRID RUGGED TARGET CONNECTORS
FLAT & CONCAVE FACE • SOLDERCUP TERMINATION



Series 868-10-00X-00-0X1000



Series 868-10-00X-00-0X2000



- Rugged Target Connectors for use on 4mm grid, supplied in 2 - 6 position connectors
- Target Connectors provide an excellent gold-plated conductive mating surface for spring-loaded connectors. These series are offered with flat or concave face, providing additional surface area, for mating with Mill-Max 858 and 868 series SMT, through hole or wire termination spring loaded connectors
- Mounting tabs provide a means for secure attachment to PCB's, cable assemblies or other housings and may be specified with or without threaded inserts.
- High temperature thermoplastic insulators are suitable for most automated and manual soldering processes
- Solder cup termination accommodates up to 16 AWG wire
- Series 868-10-00X-00-0X100 use MM #1968-0 target pins & Series 868-10-00X-00-0X200 use #1968-1 target pins. See page 223.5 for details

ORDERING INFORMATION

Series 868 (Flat Face Soldercup Termination)

868-10-00X-00-0X1000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

Series 868 (Concave Face Soldercup Termination)

868-10-00X-00-0X2000

Specify number of pins 2-6

No Threaded inserts = 0
(#4-40) Threaded inserts = 1
(M2.5) Threaded inserts = 2

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

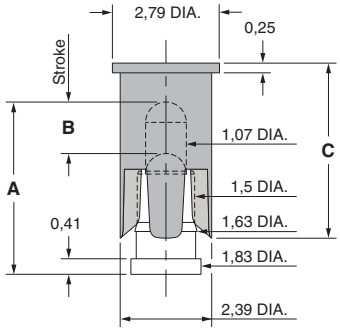
SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25 µm Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

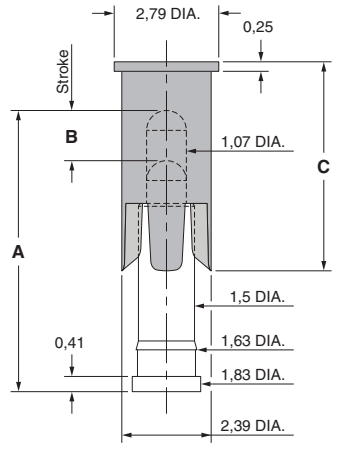
SERIES 806 • REMOVABLE PICK & PLACE CAP, SPRING-LOADED PINS • SURFACE MOUNT



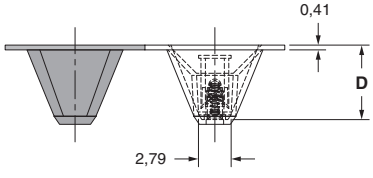
Series 806 (Contact Style 1,2,3,4,10,11)



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 3,5 to 7,5 with a rated travel of either 0,5 or 0,7
- 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, 330mm 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)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	3,5	0,5	0,76-1,0	4,57	6,4	780
2	3,94	0,5	0,76-1,0	4,57	6,4	780
3	4,5	0,7	1,27-1,4	4,57	6,4	780
4	5,0	0,7	1,27-1,4	4,57	6,4	780
10	5,51	0,7	1,27-1,4	5,59	7,24	750
11	5,99	0,7	1,27-1,4	5,59	7,24	750
12	6,48	0,7	1,27-1,4	5,59	9,17	550
13	6,99	0,7	1,27-1,4	5,59	9,17	550
14	7,49	0,7	1,27-1,4	5,59	9,17	550

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 1-14): Beryllium copper-plated 0,25µm 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:

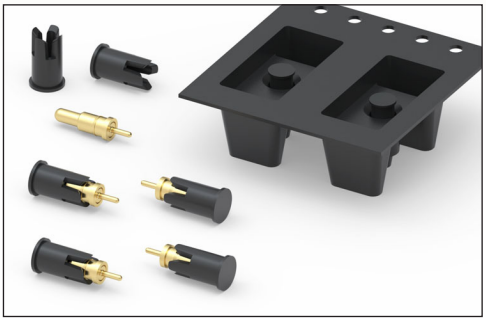
Current rating: 2A (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

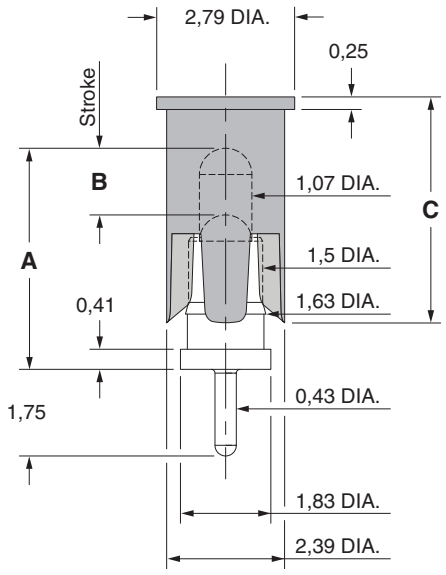
SPRING-LOADED CONNECTORS

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

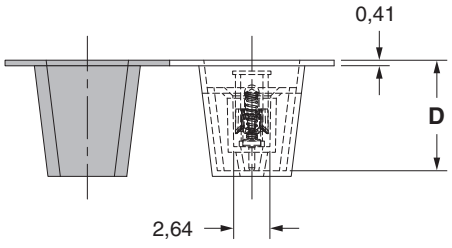


- Through hole mount spring-loaded pins with removable pick & place cap are avaiable in four heights from 3,5 to 5,0 with a rated travel of either 0,5 or 0,7
- Spring pins used in this series are Mill-Max 0906-X (see page 25 for more details)
- The pick & place cap allows individual spring-loaded contacts 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, 330mm 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)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	3,5	0,5	0,76-1,0	4,57	8,05	640
2	3,94	0,5	0,76-1,0	4,57	8,05	640
3	4,5	0,7	1,27-1,4	4,57	8,05	640
4	5,0	0,7	1,27-1,4	4,57	8,05	640

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51µm gold over 2,54µm nickel
Spring (Contact style 1-4): Beryllium copper-plated 0,25µm 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 (continous), 3A (peak) per contact
Contact resistance: 20mΩ max.
Insulation resistance: 10,000MΩ min.

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 319, 330 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

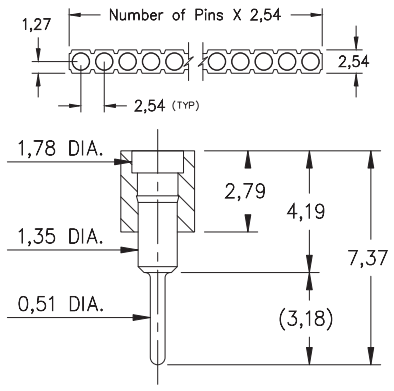


FIG. 1

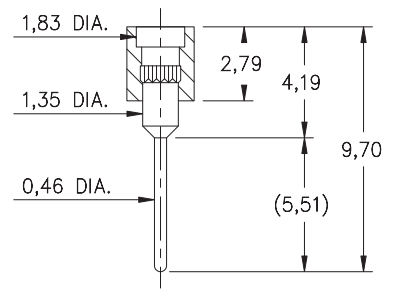


FIG. 2

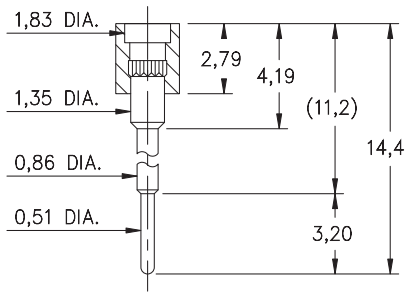


FIG. 3

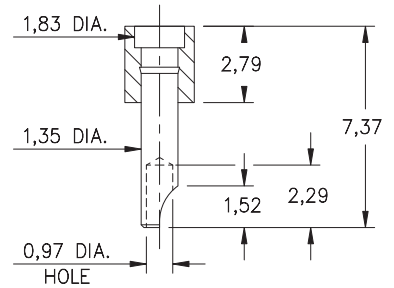


FIG. 4

- Series 319 and 330 Spring Target Connectors, supplied in single row strips. Available in through-hole and wire termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1938, #1940, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 319...001**	**Standard Solder Tails**
	319-10-1_ _-00-001000 **Specify number of pins** ← 01-64	
FIG. 2	**Series 319...002**	**Long Solder Tails**
	319-10-1_ _-00-002000 **Specify number of pins** ← 01-64	
FIG. 3	**Series 319...005**	**Elevated with Solder Tails**
	319-10-1_ _-00-005000 **Specify number of pins** ← 01-64	
FIG. 4	**Series 330...240**	**Solder Cups**
	330-10-1_ _-00-240000 **Specify number of pins** ← 01-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

MILL-MAX *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SPRING-LOADED CONNECTORS

SERIES 319, 399 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

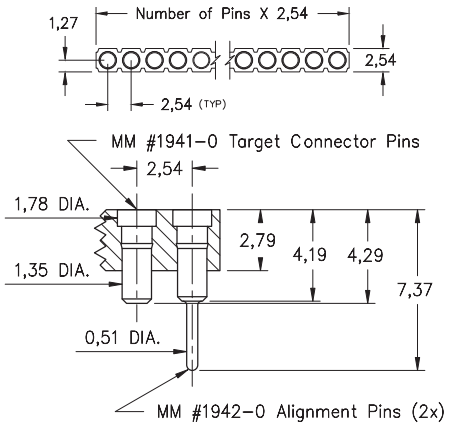
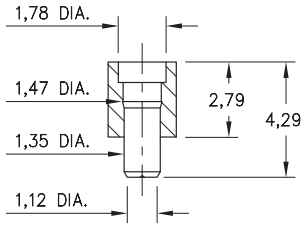
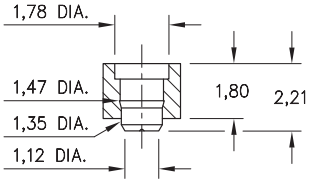


FIG. 1



Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

FIG. 2



Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

FIG. 3

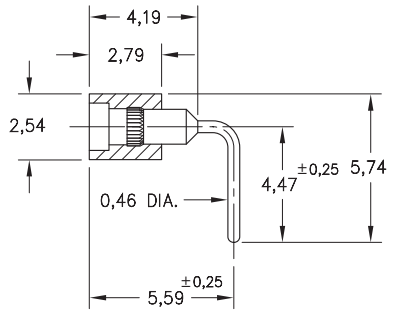
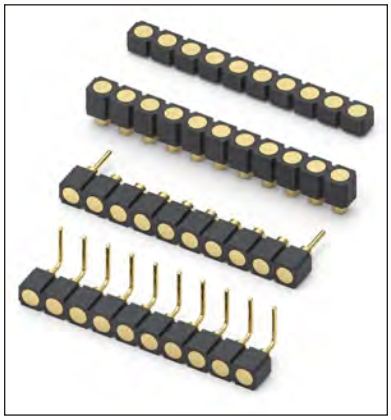


FIG. 4

- Series 319 and 399 Spring Target Connectors, supplied in single row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1940, #1941/1942, #1953 and #1954 pins. See pages 218 & 223.3 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 319...041**	**Surface Mount w/ Alignments Pins**
	319-10-1__-30-041000	
	Specify number of pins	03-64
FIG. 2	**Series 319...008**	**Surface Mount**
	319-10-1__-30-008000	
	Specify number of pins	01-64
FIG. 3	**Series 319...054**	**Low Profile Surface Mount**
	319-10-1__-30-054000	
	Specify number of pins	01-64
FIG. 4	**Series 399...008**	**Right Angle Solder Tails**
	399-10-1__-10-008000	
	Specify number of pins	01-64

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 319, 399 • 2,54 GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

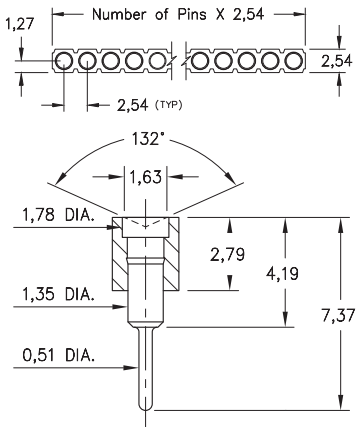
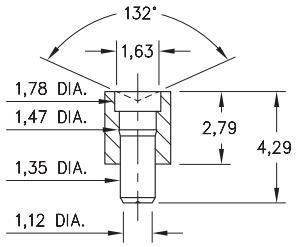
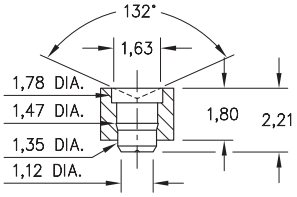


FIG. 1



Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

FIG. 2



Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

FIG. 3

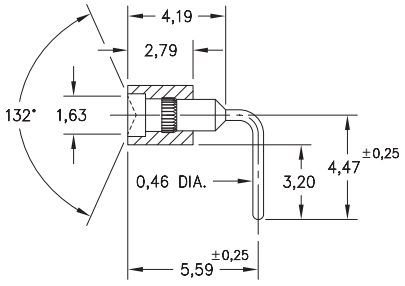
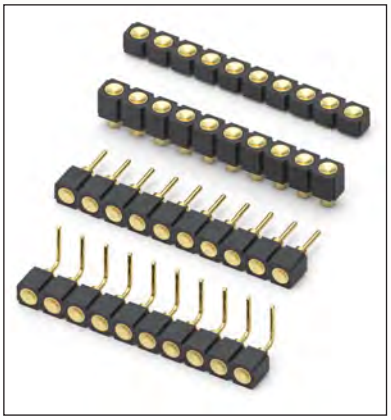


FIG. 4

- Series 319 and 399 Spring Target Connectors, supplied in single row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1948, #1955, #1957 and #1960 pins. See pages 223.1, 223.2 and 223.3 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 319...006**	**Standard Solder Tails**
	319-10-1__-00-006000 **Specify number of pins** ↑ 01-64	
FIG. 2	**Series 319...007**	**Surface Mount**
	319-10-1__-30-007000 **Specify number of pins** ↑ 01-64	
FIG. 3	**Series 319...055**	**Low Profile Surface Mount**
	319-10-1__-30-055000 **Specify number of pins** ↑ 01-64	
FIG. 4	**Series 399...007**	**Right Angle Solder Tails**
	399-10-1__-10-007000 **Specify number of pins** ↑ 01-64	

RoHS - 2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SPRING-LOADED CONNECTORS

SERIES 419, 430 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

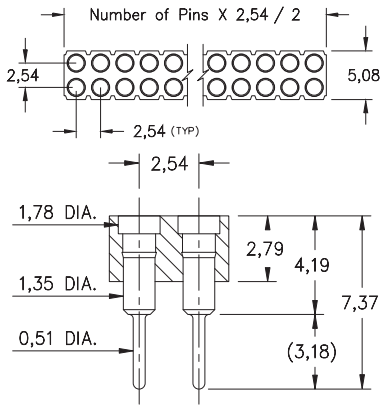


FIG. 1

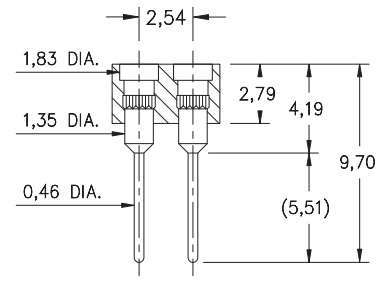


FIG. 2

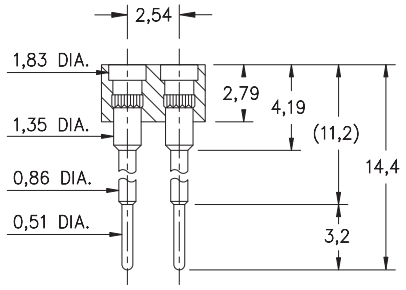


FIG. 3

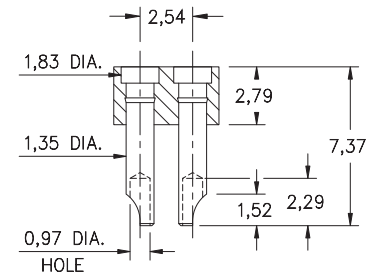
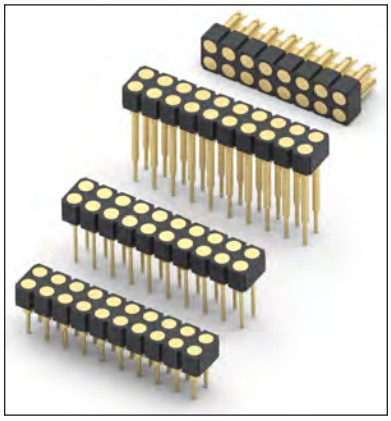


FIG. 4

- Series 419 and 430 Spring Target Connectors, supplied in double row strips. Available in through-hole and wire termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1938, #1940, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 419...001**	**Standard Solder Tails**
	419-10-2__-00-001000 **Specify number of pins** ↑ 04-64	
FIG. 2	**Series 419...002**	**Long Solder Tails**
	419-10-2__-00-002000 **Specify number of pins** ↑ 04-64	
FIG. 3	**Series 419...005**	**Elevated with Solder Tails**
	419-10-2__-00-005000 **Specify number of pins** ↑ 04-64	
FIG. 4	**Series 430...240**	**Solder Cups**
	430-10-2__-00-240000 **Specify number of pins** ↑ 04-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

SPRING-LOADED CONNECTORS

SERIES 419, 499 • 2,54 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

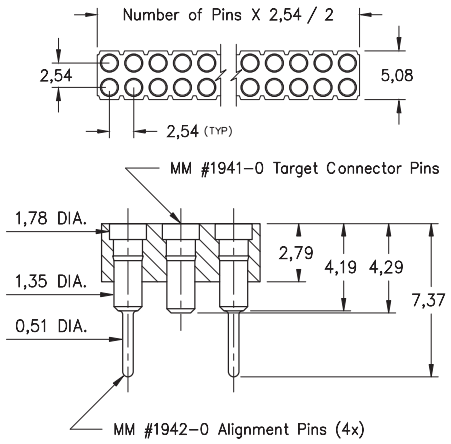
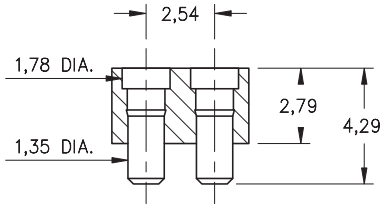
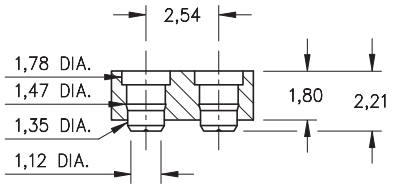


FIG. 1



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 2



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 3

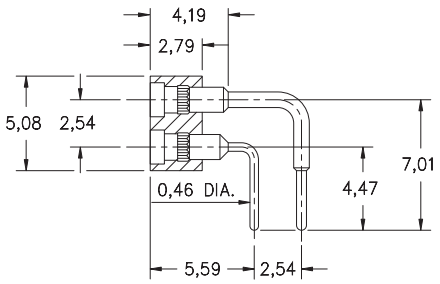
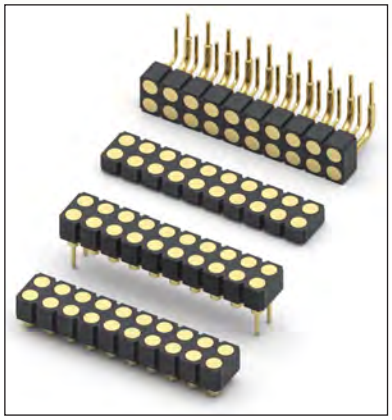


FIG. 4

- Series 419 and 499 Spring Target Connectors, supplied in double row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1940, #1941/1942, #1953 and #1954 pins. See pages 218 & 223.3 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 419...042**	**Surface Mount w/ Alignments Pins**
	419-10-2__-30-042000 **Specify number of pins** ← 06-72	
FIG. 2	**Series 419...041**	**Surface Mount**
	419-10-2__-30-041000 **Specify number of pins** ← 04-72	
FIG. 3	**Series 419...054**	**Low Profile Surface Mount**
	419-10-2__-30-054000 **Specify number of pins** ← 04-72	
FIG. 4	**Series 499...008**	**Right Angle Solder Tails**
	499-10-2__-10-008000 **Specify number of pins** ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

SPRING-LOADED CONNECTORS

SERIES 419, 499 • 2,54 GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

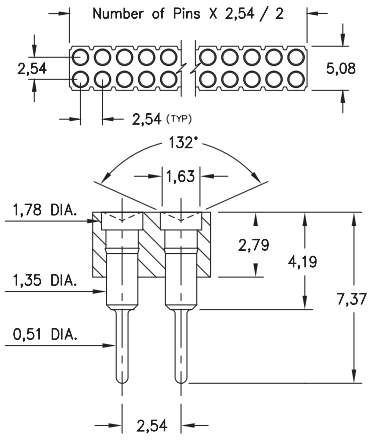
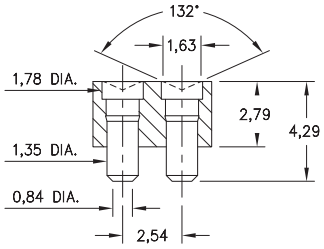
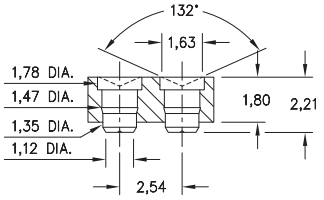


FIG. 1



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 2



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 3

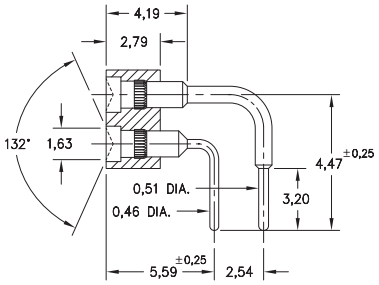
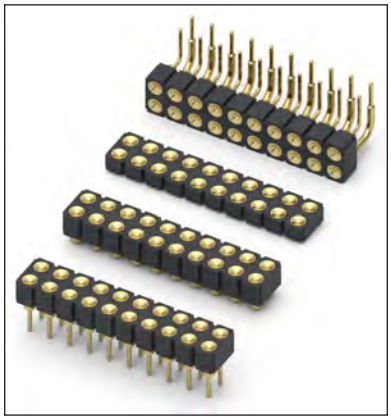


FIG. 4

- Series 419 and 499 Spring Target Connectors, supplied in double row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard 1,07 dia. spring pin plungers
- Target connectors use MM #1947, #1948, #1955 and #1958/1960 pins. See pages 223.1, 223.2 and 223.3 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 419...006**	**Standard Solder Tails**
	419-10-2__-00-006000	
	Specify number of pins ← 04-64	
FIG. 2	**Series 419...007**	**Surface Mount**
	419-10-2__-30-007000	
	Specify number of pins ← 04-72	
FIG. 3	**Series 419...055**	**Low Profile Surface Mount**
	419-10-2__-30-055000	
	Specify number of pins ← 04-72	
FIG. 4	**Series 499...007**	**Right Angle Solder Tails**
	499-10-2__-10-007000	
	Specify number of pins ← 02-64	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

MILL-MAX® *Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com*

SPRING-LOADED CONNECTORS

SERIES 856 • 1,27 GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

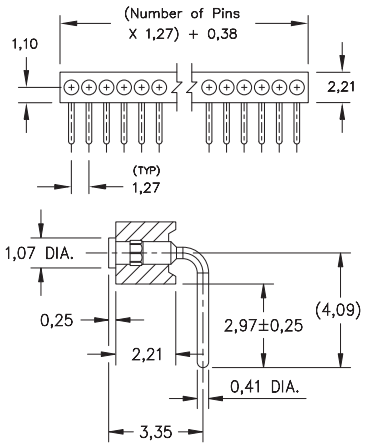


FIG. 1

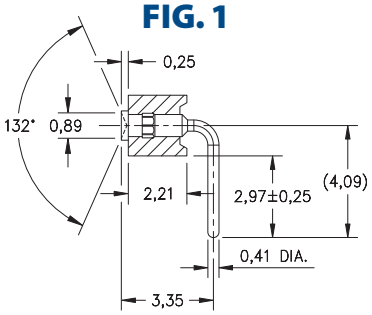


FIG. 2

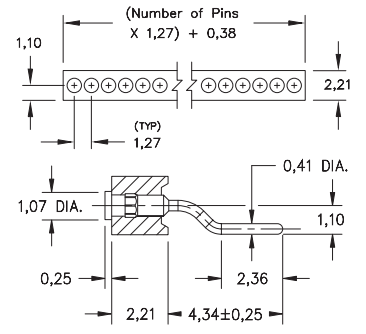
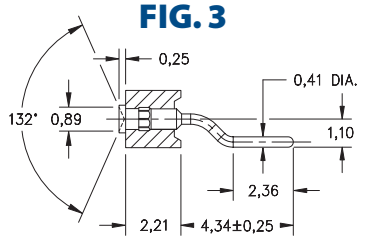


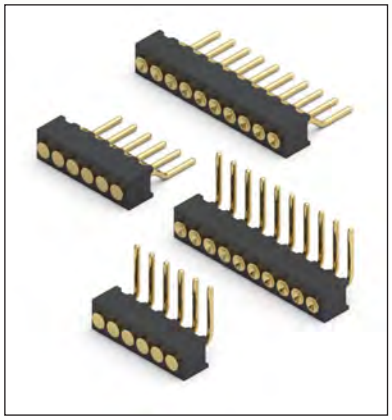
FIG. 3



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 4

- Series 856 Spring Target Connectors, supplied in single row strips
- Spring Target Connectors are offered with a flat or concave surface for making contact with our standard 0,48 dia. spring pin plungers. The target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector
- Target connectors use MM #1831-1 and #1931-1 pins. See page 223.2 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 856...20-001**	**Flat face / Right Angle**
	856-10-0__-20-001000 **Specify number of pins** 01-20	
FIG. 2	**Series 856...20-002**	**Concave face / Right Angle**
	856-10-0__-20-002000 **Specify number of pins** 01-20	
FIG. 3	**Series 856...40-001**	**Flat face / Surface Mount**
	856-10-0__-40-001000 **Specify number of pins** 01-20	
FIG. 4	**Series 856...40-002**	**Concave face / Surface Mount**
	856-10-0__-40-002000 **Specify number of pins** 01-20	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

SPRING-LOADED CONNECTORS

SERIES 856, 857 • 1,27 GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS

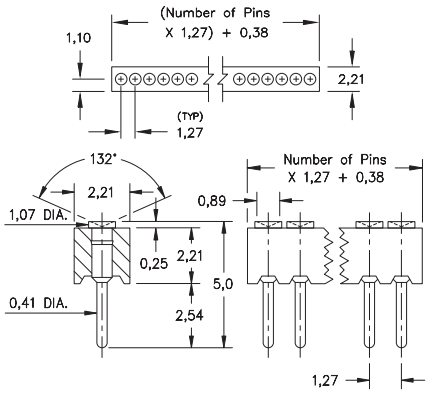
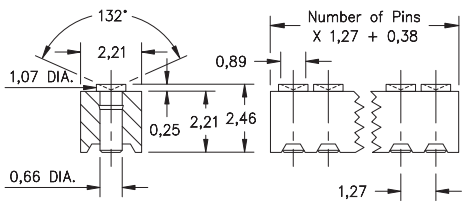


FIG. 1



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 2

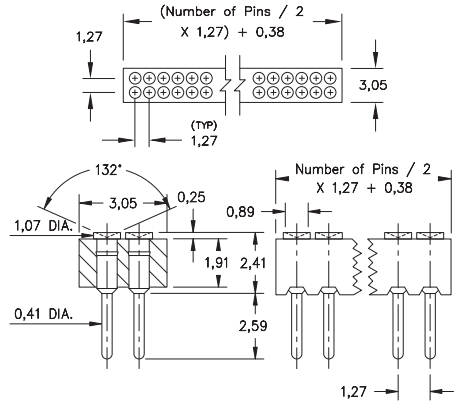
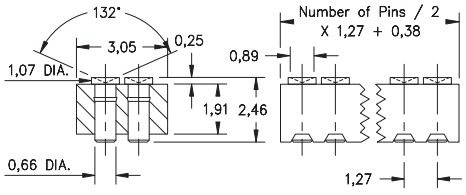


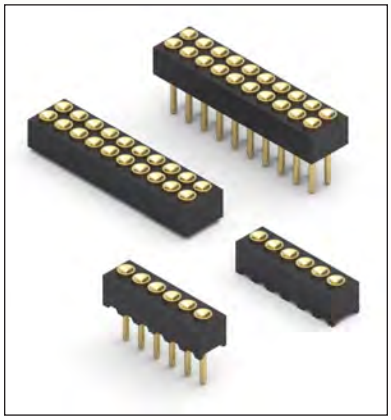
FIG. 3



Coplanarity 0,13. For Pin counts >40 positions, consult Technical Support.

FIG. 4

- Series 856 and 857 Target Connectors, SMT & through-hole, supplied in single and double row strips
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard 0,48 dia. spring pin plungers
- Target connectors use MM #1934 (through-hole) and #1936 (surface mount) pins. See page 223.2 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 856...10-002**	**Concave face / Solder Tails**
	856-10-0__-10-002000	
	Specify number of pins ← 01-20	
FIG. 2	**Series 856...30-002**	**Concave face / Surface Mount**
	856-10-0__-30-002000	
	Specify number of pins ← 02-20	
FIG. 3	**Series 857...10-002**	**Concave face / Solder Tails**
	857-10-0__-10-002000	
	Specify number of pins ← 04-40	
FIG. 4	**Series 857...30-002**	**Concave face / Surface Mount**
	857-10-0__-30-002000	
	Specify number of pins ← 04-40	

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	10 µ" Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 856, 857 • 1,27 GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS

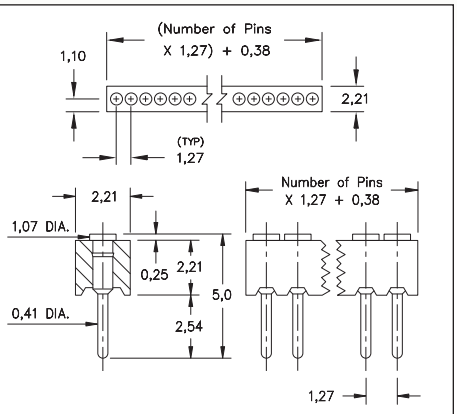
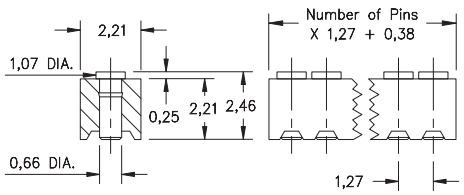


FIG. 1



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 2

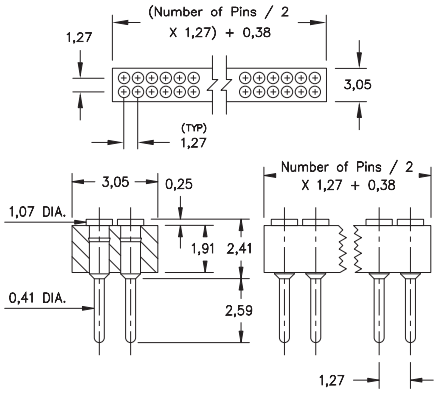
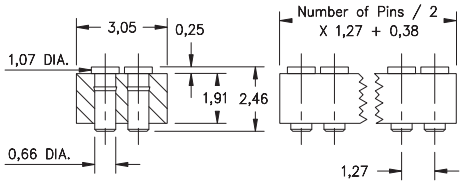


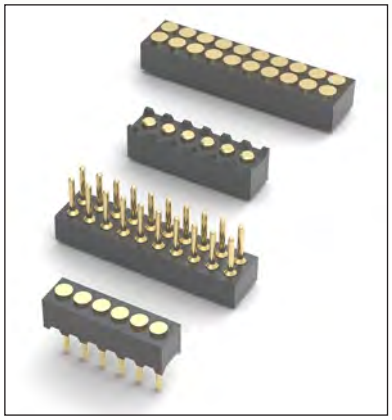
FIG. 3



Coplanarity 0,13. For Pin counts >40 positions, consult Technical Support.

FIG. 4

- Series 856 and 857 Target Connectors, SMT & through-hole, supplied in single and double row strips
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard 0,48 dia. spring pin plungers
- Target connectors use MM #1933 (through-hole) and #1935 (surface mount) pins. See page 223.2 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1	**Series 856...051**	**Flat face / Solder Tails**
	856-10-0__-10-051000	
	Specify number of pins ↑	01-20
FIG. 2	**Series 856...051**	**Flat face / Surface Mount**
	856-10-0__-30-051000	
	Specify number of pins ↑	02-20
FIG. 3	**Series 857...051**	**Flat face / Solder Tails**
	857-10-0__-10-051000	
	Specify number of pins ↑	04-40
FIG. 4	**Series 857...051**	**Flat face / Surface Mount**
	857-10-0__-30-051000	
	Specify number of pins ↑	04-40

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 830 • 2mm GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

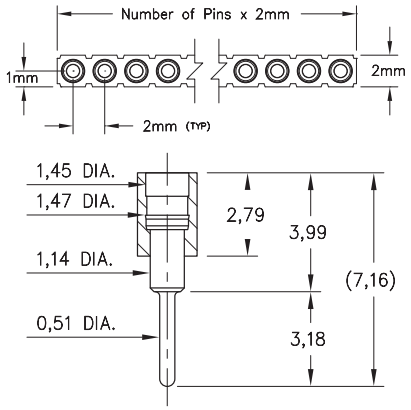


FIG. 1

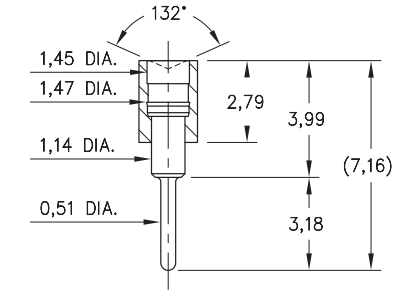
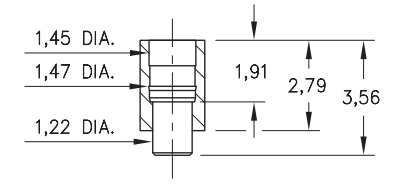
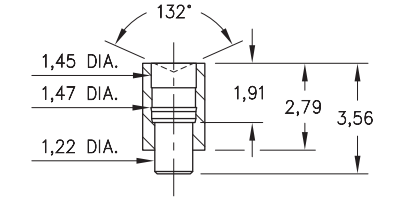


FIG. 2



Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

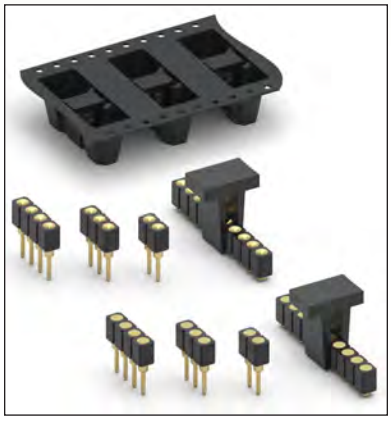
FIG. 3



Coplanarity 0,13. For Pin counts >10 positions, consult Technical Support.

FIG. 4

- Series 830 2mm Spring Target Connectors, supplied in single row strips
- Target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector. Available in both through-hole and SMT terminations with the choice of either flat or concave face contact surfaces. Concave face targets provide additional surface area for mating with our standard 0,81 diameter plungers
- Target connectors use MM #1949, #1950, #1951, and #1952 pins. See page 223.1 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1

Series 830...003 — **Flat face / Solder Tails**

830-10-0_ _-10-003000

Specify number of pins 01-20

FIG. 2

Series 830...004 — **Concave face / Solder Tails**

830-10-0_ _-10-004000

Specify number of pins 01-20

FIG. 3

Series 830...30-003 — **Flat face / Surface Mount**

830-10-0_ _-30-003XXX

Specify number or pins 02-10

Tube packaged = 000
Tape & reel packaged = 191
400 parts per 330mm reel

FIG. 4

Series 830...30-004 — **Concave face / Surface Mount**

830-10-0_ _-30-004XXX

Specify number or pins 02-10

Tube packaged = 000
Tape & reel packaged = 191
400 parts per 330mm reel

RoHS-2 2011/65/EU

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

SERIES 832 • 2mm GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

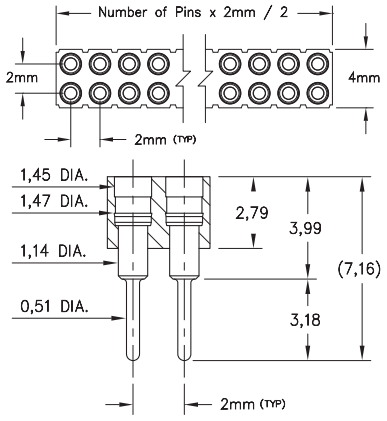


FIG. 1

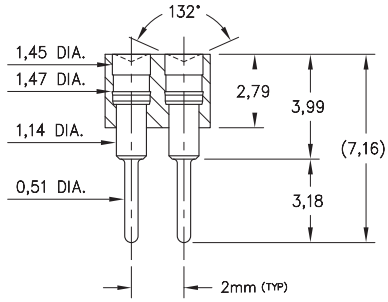
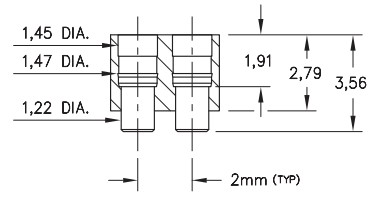
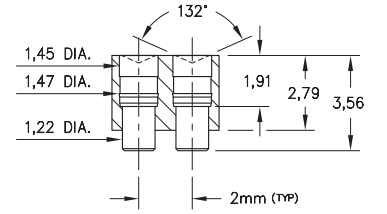


FIG. 2



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 3



Coplanarity 0,13. For Pin counts >20 positions, consult Technical Support.

FIG. 4

- Series 832 2mm Spring Target Connectors, supplied in double row strips
- Target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector. Available in both through-hole and SMT terminations with the choice of either flat or concave face contact surfaces. Concave face targets provide additional surface area for mating with our standard 0,81 diameter plungers
- Target connectors use MM #1949, #1950, #1951, and #1952 pins. See page 223.1 for details
- Insulators are high temperature thermoplastic



ORDERING INFORMATION

FIG. 1 — **Series 832...003** — **Flat face / Solder Tails**

832-10-0_ _-10-003000

Specify number of pins 04-20

FIG. 2 — **Series 832...004** — **Concave face / Solder Tails**

832-10-0_ _-10-004000

Specify number of pins 04-20

FIG. 3 — **Series 832...30-003** — **Flat face / Surface Mount**

832-10-0_ _-30-003XXX

Specify number or pins 04-20

Tube packaged = 000
Tape & reel packaged = 191
400 parts per 330mm reel

FIG. 4 — **Series 832...30-004** — **Concave face / Surface Mount**

832-10-0_ _-30-004XXX

Specify number or pins 04-20

Tube packaged = 000
Tape & reel packaged = 191
400 parts per 330mm reel

RoHS-2 2011/65/EU

XX=Plating Code See Below

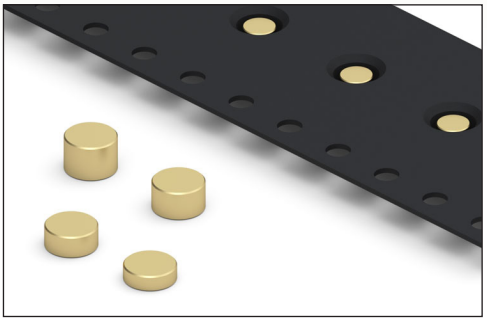
For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

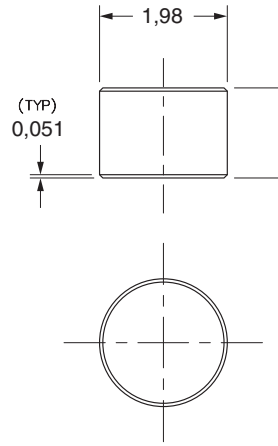
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

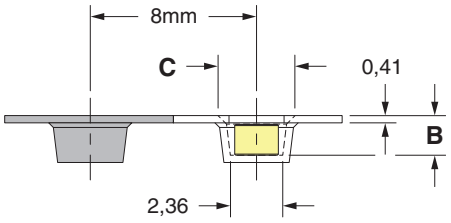
SERIES 1578 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



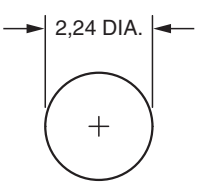
Series 1578 (Target Disc)



Series 1578 (Tape Pocket Details)



Series 1578 (Suggested footprint layout)



- The 1578-X-57-15-00-00-03-0 Surface mount disc is 1,98 in diameter and available in four heights from 0,64 to 1,4 +/-0,051 tall.
  Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1578-X's are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

ORDERING INFORMATION

Series 1578 (Tape & Reel Packaged)

1578-X-57-15-00-00-03-0

Specify contact style (0-3)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	0,64	0,89	3,05	7,200
1	0,89	1,14	3,3	6,000
2	1,14	1,4	3,33	5,125
3	1,4	1,65	3,38	4,000

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	15 ◆			
Pin Plating	0,25 µm Au			

SPECIFICATIONS:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard

Dimensions: **Millimeters**

Tolerances On: Lengths: ± 0,051
Diameters: ± 0,025
Angles: ± 2 °

RoHS-2 2011/65/EU

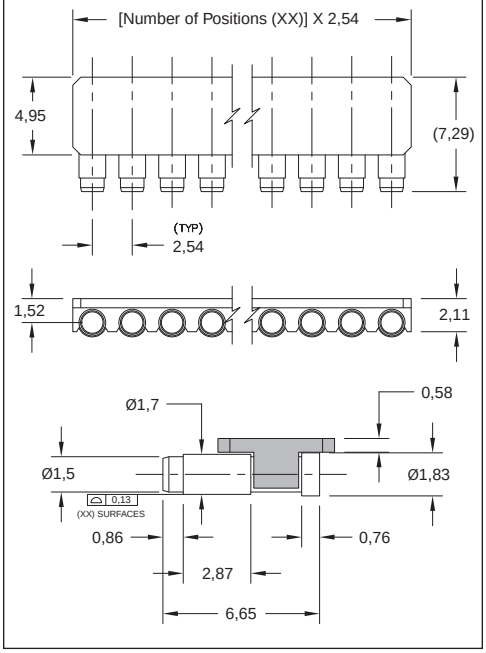
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

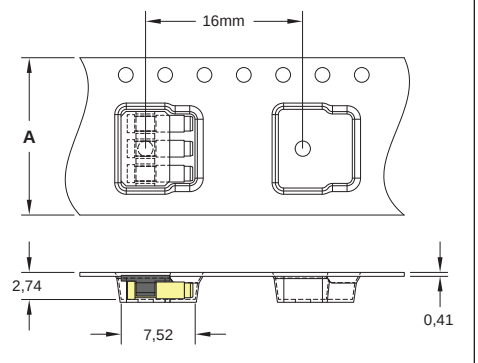
SERIES 319 • 2,54 GRID HSMT TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS



Series 319 (HSMT Target)



Series 319 (Tape Pocket Details)



- Series 319 HSMT Spring Target Connectors, supplied in single row strips
- Target Connectors provide an excellent gold-plated conductive mating surface for spring loaded connectors. This series is offered with a flat face for making contact with our standard 1,07 dia. spring pin plungers
- These target connectors provide a low profile, horizontal surface mount connection to the PCB and are designed to mate with standard 2,54 pitch spring loaded connectors. They are ideal for daisy chaining P.C.B.'s when mated with SLC 810-22-1XX-40-005191 or for mating boards in a perpendicular orientation
- The 319 series is packaged on tape & reel - 16, 24, 32 or 44 mm wide x 16 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D

ORDERING INFORMATION

Series 319 (Tape & Reel Packaged)

319-10-1__-40-080001

Specify number of pins 02-10

Number of Pins	Tape Width Size (A)	Quantity per Reel
2	16mm	1,450
3	16mm	1,450
4	24mm	1,450
5	24mm	1,450
6	24mm	1,450
7	32mm	1,450
8	32mm	1,450
9	44mm	1,450
10	44mm	1,450

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	10 ◆			
Pin Plating	0,25µm Au			

Technical Specifications

Materials:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard
Pin Finish: 0,25µm Gold over Nickel
Insulator: High temperature Nylon 46, rated UL94 V-0

Electrical:

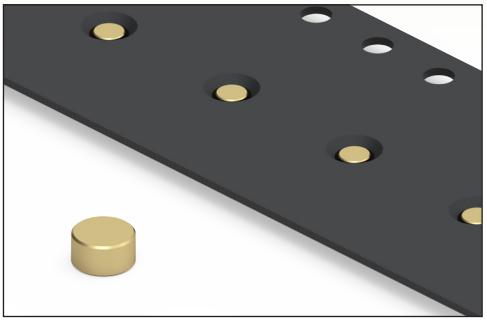
Insulation resistance: 10,000MΩ min.
Dielectric strength: 700Vrms min.

RoHS-2 2011/65/EU

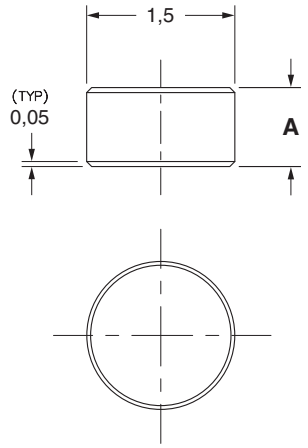
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

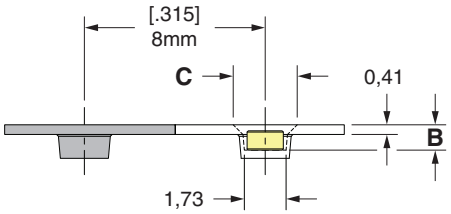
SERIES 1559 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



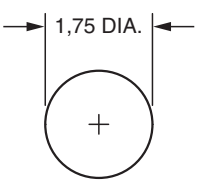
Series 1559 (Target Disc)



Series 1559 (Tape Pocket Details)



Series 1559 (Suggested footprint layout)



- The 1559-1-57-15-00-00-03-0 Surface mount disc is 1,5 in diameter. Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1559-1 are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

ORDERING INFORMATION

Series 1559 (Tape & Reel Packaged)

1559-X-57-15-00-00-03-0

Specify contact style (1)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
1	0,80	1,04	2,64	6,000

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	15 ◆			
Pin Plating	0,25 µm Au			

SPECIFICATIONS:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard

Dimensions: **Millimeters**

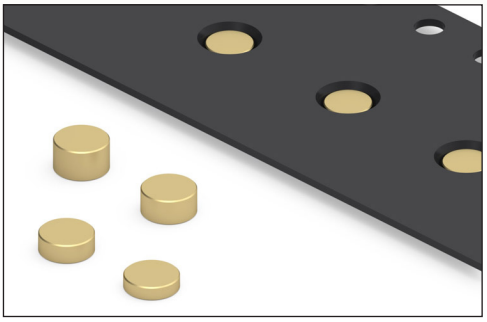
Tolerances On: Lengths: ± 0,051
Diameters: ± 0,025
Angles: ± 2 °

RoHS-2 2011/65/EU

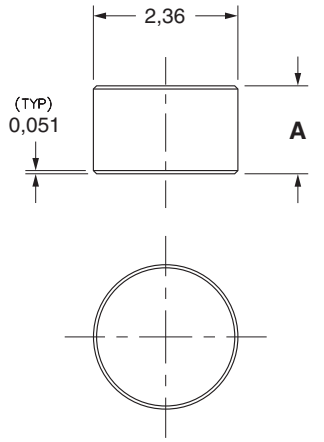
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

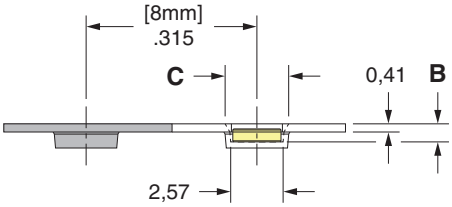
SERIES 1593 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



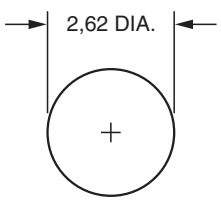
Series 1593 (Target Disc)



Series 1593 (Tape Pocket Details)



Series 1593 (Suggested footprint layout)



- The 1593-X-57-15-00-00-03-0 Surface mount disc is 2,36mm in diameter and available in four heights from 0,64 to 1,4 +/-0,051 tall.
  Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1593-X's are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

ORDERING INFORMATION

Series 1593 (Tape & Reel Packaged)

1593-X-57-15-00-00-03-0

Specify contact style (0-3)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	0,64	0,89	3,12	7,200
1	0,89	1,14	3,15	6,000
2	1,14	1,4	3,15	5,125
3	1,4	1,65	3,15	4,000

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	15 ◆			
Pin Plating	0,25 µm Au			

SPECIFICATIONS:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard

Dimensions: Inches

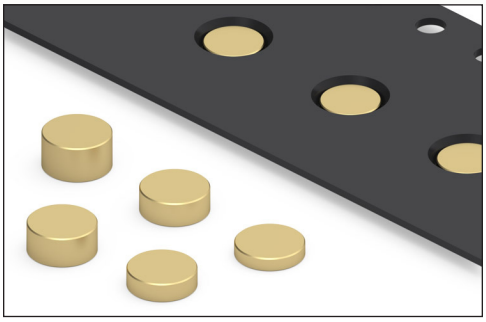
Tolerances On: Lengths: ± 0,051
Diameters: ± 0,025
Angles: ± 2 °

RoHS-2 2011/65/EU

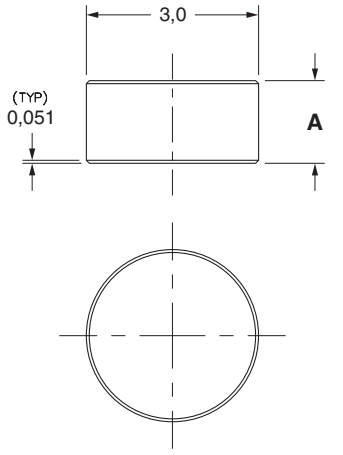
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

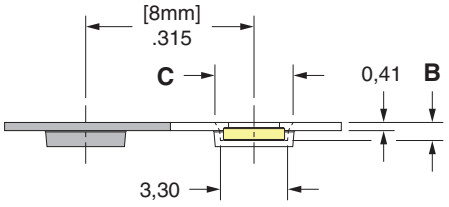
SERIES 1618 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



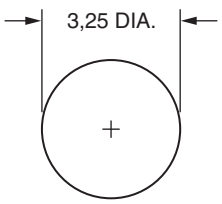
Series 1618 (Target Disc)



Series 1618 (Tape Pocket Details)



Series 1618 (Suggested footprint layout)



- The 1618-X-57-15-00-00-03-0 Surface mount disc is 3,0mm in diameter and available in five heights from 0,64 to 1,65 +/-0,051 tall.
  Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1618-X's are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

ORDERING INFORMATION

Series 1618 (Tape & Reel Packaged)

1618-X-57-15-00-00-03-0

Specify contact style (0-4)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	0,64	0,89	3,84	7,200
1	0,89	1,14	3,84	6,000
2	1,14	1,4	3,84	5,125
3	1,4	1,65	3,84	4,000
4	1,65	1,91	3,86	3,850

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	15 ◆			
Pin Plating	0,25 µm Au			

SPECIFICATIONS:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard

Dimensions: Inches

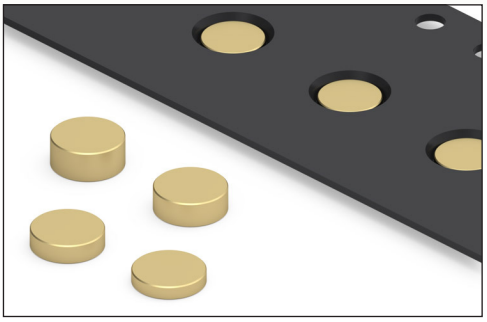
Tolerances On: Lengths: ± 0,051
Diameters: ± 0,025
Angles: ± 2 °

RoHS-2 2011/65/EU

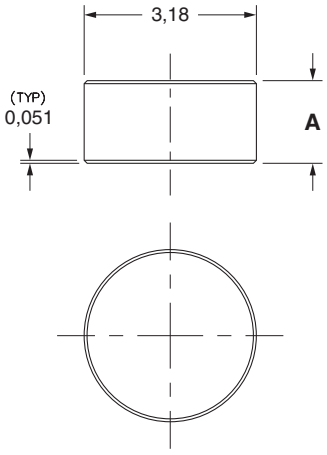
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

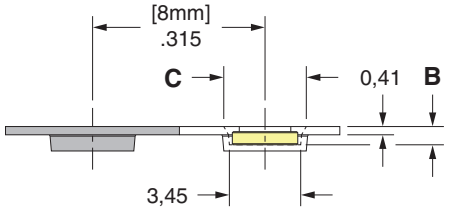
SERIES 1625 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



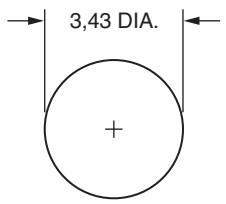
Series 1625 (Target Disc)



Series 1625 (Tape Pocket Details)



Series 1625 (Suggested footprint layout)



- The 1625-X-57-15-00-00-03-0 Surface mount disc is 3,18mm in diameter and available in four heights from 0,64 to 1,4 +/-0,051 tall.
  Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1625-X's are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

ORDERING INFORMATION

Series 1625 (Tape & Reel Packaged)

1625-X-57-15-00-00-03-0

Specify contact style (0-3)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	0,64	0,89	4,01	7,200
1	0,89	1,14	4,01	6,000
2	1,14	1,4	4,01	5,125
3	1,4	1,65	4,01	4,000

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	15 ◆			
Pin Plating	0,25 µm Au			

SPECIFICATIONS:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard

Dimensions: Inches

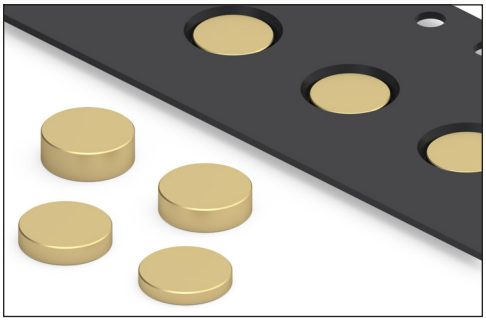
Tolerances On: Lengths: ± 0,051
Diameters: ± 0,025
Angles: ± 2 °

RoHS-2 2011/65/EU

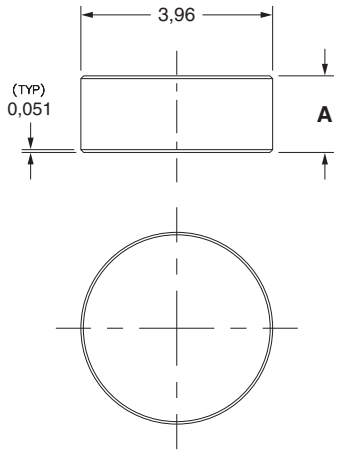
Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com

SPRING-LOADED CONNECTORS

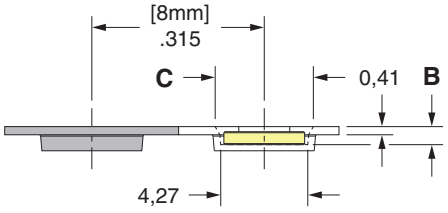
SERIES 1656 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



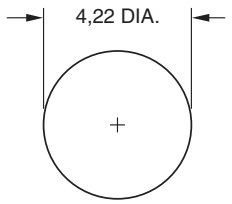
Series 1656 (Target Disc)



Series 1656 (Tape Pocket Details)



Series 1656 (Suggested footprint layout)



- The 1656-X-57-15-00-00-03-0 Surface mount disc is 3,96mm in diameter and available in four heights from 0,64 to 1,4 +/-0,51 tall.
  Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring loaded pins and connectors as well as test probes. The discs are typically placed on solder pasted PCB pads and then subjected to reflow soldering. Once soldered the terminals are ready to be used as reliable, durable contact points.
- The 1656-X's are packaged on tape & reel - 16 mm wide x 8 mm pitch, making them simple to integrate into existing pick & place equipment and assembly processes. The tape packaging is per EIA-481-D
- Custom sizes are quickly and easily achievable via Mill-Max's high speed precision machining processes. You can contact our technical support team to discuss your particular application and requirements.

ORDERING INFORMATION

Series 1656 (Tape & Reel Packaged)

1656-X-57-15-00-00-03-0

Specify contact style (0-3)

Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	0,64	0,89	4,83	7,200
1	0,89	1,14	4,83	6,000
2	1,14	1,4	4,83	5,125
3	1,4	1,65	4,83	4,000

XX=Plating Code See Below

For Electrical, Mechanical & Enviromental Data, See page 264

SPECIFY PLATING CODE XX=	15 ◆			
Pin Plating	0,25 µm Au			

SPECIFICATIONS:

Pin Material: Brass Alloy 385 or 360, 1/2 Hard

Dimensions: Inches

Tolerances On: Lengths: ± 0,051
Diameters: ± 0,025
Angles: ± 2 °

RoHS-2 2011/65/EU

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, P.O. Box 300, Oyster Bay, NY 11771 • 516-922-6000 • Fax: 516-922-9253 • www.mill-max.com