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SPRING-LOADED CONNECTORS







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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 mezzaninetiered 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.

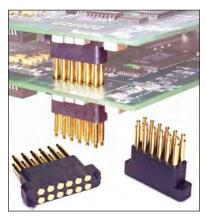
MILL-MAX SPRING-LOADED CONNECTORS CAN MATE TO THE FOLLOWING SURFACES:

- 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.





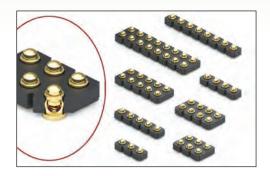


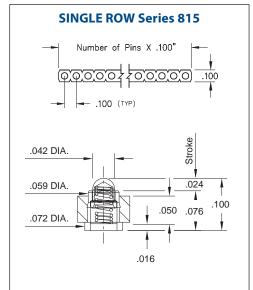


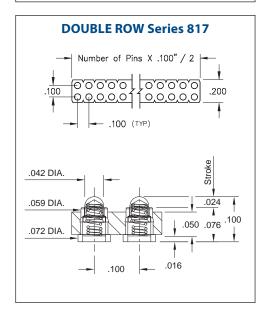


SPRING-LOADED CONI

SERIES 815 & 817 • .100" GRID SURFACE MOUNT, ULTRA LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

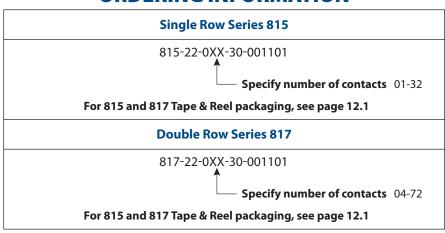






- Modular contacts for use on .100" grid, available in a height of .100", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .012" mid. stroke and a .024" max. stroke
- · Low resistance, 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 .082" Ø solder pad prior to reflow soldering

ORDERING INFORMATION



Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.012"): 60 grams

Durability: Up to 1,000,000 cycles

Coplanarity: .005" (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: $20m\Omega$ max. Insulation resistance: 10,000M Ω min. Dielectric strength: 700Vrms min.



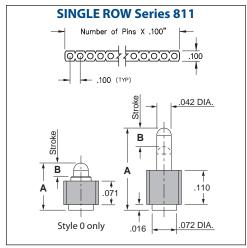


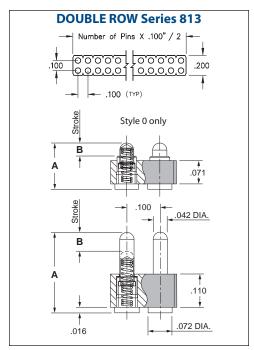
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SPRING-LOADED CONI

SERIES 811 & 813 • .100" GRID SURFACE MOUNT, LOW PROFILE • SINGLE AND DOUBLE ROW STRIPS

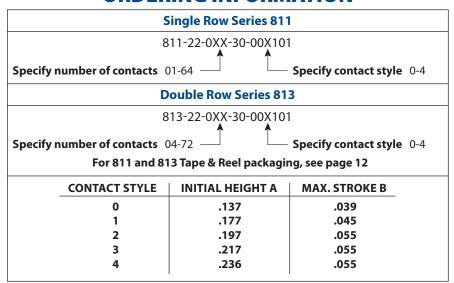






- Modular contacts for use on .100" grid, available in five heights from .137" to .236", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile 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



Technical Specifications Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel Spring: Beryllium copper-plated 10μ″ 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: .005" (Single Row up to 10 pins; Double Row up to 20 pins),

For higher pin counts, contact Technical Support

Electrical:

Voltage rating: 100Vrms/150Vdc

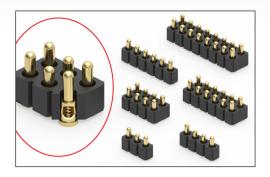
Current rating: 2A (continous), 3A (peak) per contact

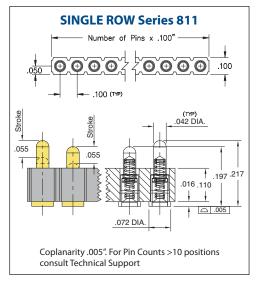
Contact resistance: $20m\Omega$ max. Insulation resistance: $10.000M\Omega$ min. Dielectric strength: 700Vrms min.

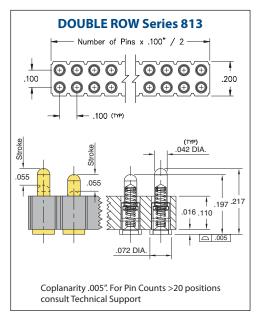




SERIES 811 & 813 • .100" GRID SURFACE MOUNT, FIRST MATE/LAST BREAK • SINGLE AND DOUBLE ROW STRIPS

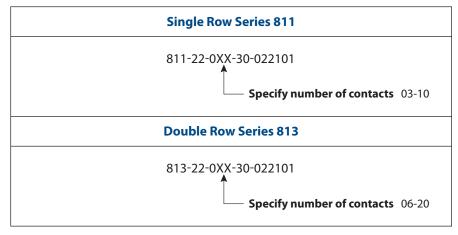






- Modular contacts for use on .100" grid, supplied in single and double row contact strips
- Taller pins in the end positions make contact first and break contact last to address applications where connection sequence is required
- Each pin has a full stroke capability of .055", allowing all pins to be compressed to the rated mid stroke while accounting for the .020" initial height offset of the 0900-3 (.217") and 0900-2 (.197")
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- · Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic

ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

. Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams

Spring force @ mid stroke (.0275"): 60 grams

Durability: Up to 1,000,000 cycles

Coplanarity: .005" (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: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.

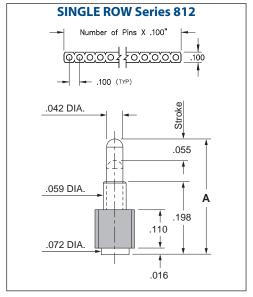


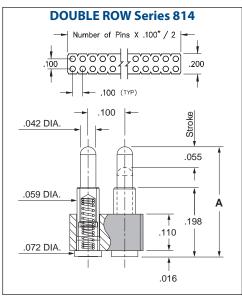


SPRING-LOADED CONI

SERIES 812 & 814 • .100" GRID SURFACE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS







- Modular contacts for use on .100" grid, available in ten heights from .255" to .430", 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

ORDERING INFORMATION

	Single Row	Series 812	
	812-22-0XX	-30-00X101	
Specify number of o	contacts 02-64	Specify	contact style 0-9
	Double Rov	v Series 814	
	814-22-0XX	-30-00X101	
Specify number of a	contacts 04-72 —		contact style 0-9
CONTACT STYLE	INITIAL HEIGHT A	CONTACT STYLE	INITIAL HEIGHT A
0	.255	5	.350
1	.275	6	.370
2	.295	7	.390
3	.315	8	.410
4	.335	9	.430

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel Spring: Beryllium copper-plated 10µ" gold

Technical Specifications

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Materials:

Spring force @ initial height (A): 25 grams Spring force @ mid stroke (.0275"): 60 grams

Durability: Up to 1,000,000 cycles

Coplanarity: .005" (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: $20m\Omega$ max. Insulation resistance: $10.000M\Omega$ min. Dielectric strength: 700Vrms min.

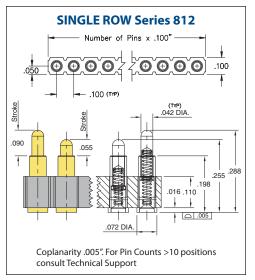


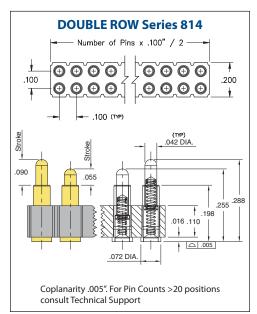


SPRING-LOADED CONI

SERIES 812 & 814 • .100" GRID SURFACE MOUNT, FIRST MATE/LAST BREAK • SINGLE AND DOUBLE ROW STRIPS

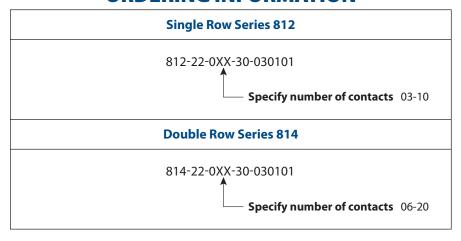






- Modular contacts for use on .100" grid, supplied in single and double row contact strips
- Taller pins in the end positions make contact first and break contact last to address applications where connection sequence is required
- The 0913-0 pin has a full stroke capability of .090", allowing all pins to be compressed to their rated mid stroke while accounting for the .033" initial height offset of the 0913-0 (.288") and 0907-0 (.255")
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- 0907-0 spring pins have .0275" mid stroke and .055" max. stroke, 0913-0 spring pin have .045" mid stroke and .090" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic

ORDERING INFORMATION



Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10μ" 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: .005" (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: $20m\Omega$ max. Insulation resistance: 10,000M Ω min. Dielectric strength: 700Vrms min.



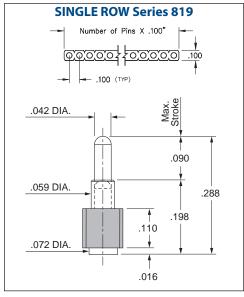


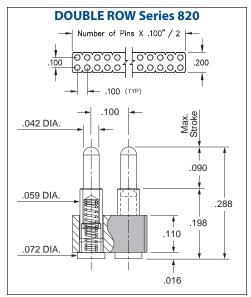
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SPRING-LOADED CONI

SERIES 819 & 820 • .100" GRID SURFACE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS

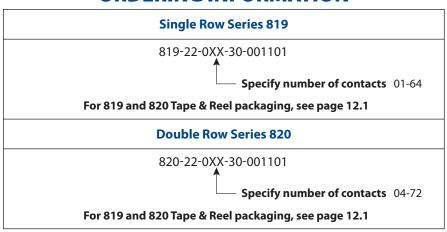






- Modular contacts for use on .100" grid, available in a height of .288", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .045" mid. stroke and a .090" max. stroke
- Low resistance, 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 .082" 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

ORDERING INFORMATION



Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.045"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

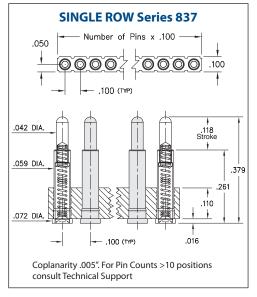
Contact resistance: $20m\Omega$ max. Insulation resistance: $10.000M\Omega$ min. Dielectric strength: 700Vrms min.

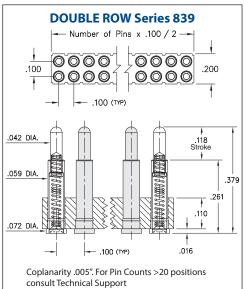




SERIES 837 & 839 • .100" GRID SURFACE MOUNT, 3MM MAX. STROKE • SINGLE AND DOUBLE ROW STRIPS

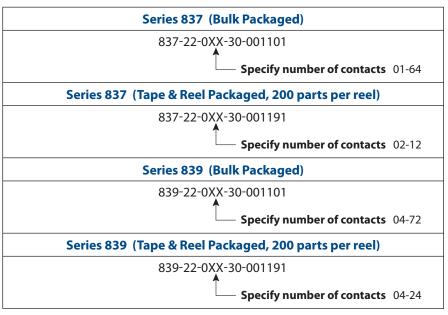






- Modular contacts for use on .100" grid, available in single and double row contact strips with recommended rated travel of .030" - .100" and max. stroke of .118" +0/-.010"
- · Precision-machined piston / base and gold-plated components
- Extended body provides greater bearing surface for increased 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 .082" \emptyset solder pads

ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Stainless Steel-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.059"): 85 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

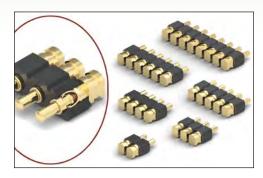
Current rating: 2A (continous), 3A (peak) per contact

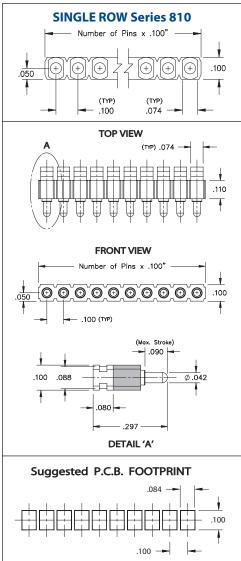
Contact resistance: $20\text{m}\Omega$ max. Insulation resistance: $10,000\text{M}\Omega$ min. Dielectric strength: 700Vrms min.





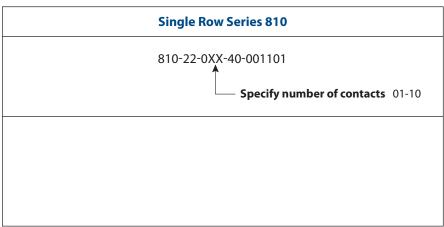
SERIES 810 • .100" GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS





- Modular contacts for use on .100" 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 .045" mid. stroke & .090" 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



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.045"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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

Capacitance: 1pF max.

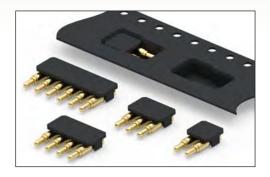


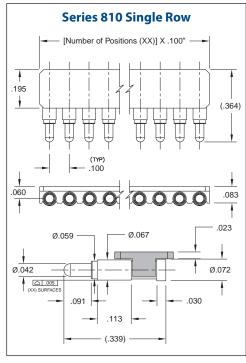


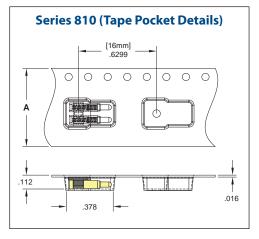
consult Technical Support

Coplanarity .005". For Pin Counts >10 positions

SERIES 810 • .100" GRID HORIZONTAL SURFACE MOUNT • SINGLE ROW STRIPS







- Modular contacts for use on .100" 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 .045" mid. stroke & .090" 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 $20\mu''$ gold over $100\mu''$ nickel Spring (Contact style 2-10): Beryllium copper-plated $10\mu''$ 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: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.



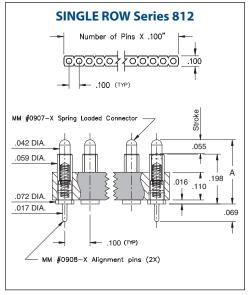


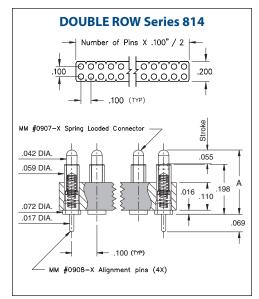
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SPRING-LOADED CONI

SERIES 812 & 814 • .100" GRID SURFACE MOUNT WITH ALIGNMENT PINS • SINGLE AND DOUBLE ROW STRIPS

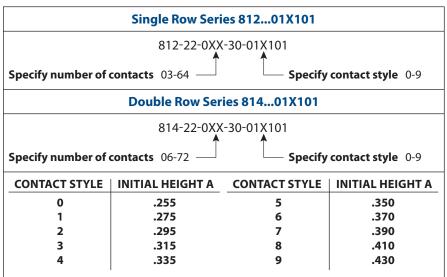






- Modular contacts for use on .100" grid, available in ten heights from .255" to .430", supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .0275" mid stroke & .055" max. stroke
- 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, .028" ±.003" plated through-holes in the circuit board are required for the alignment pins prior to intrusive reflow soldering

ORDERING INFORMATION



Materials:

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

Technical Specifications

Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams Spring force @ mid stroke (.0275"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

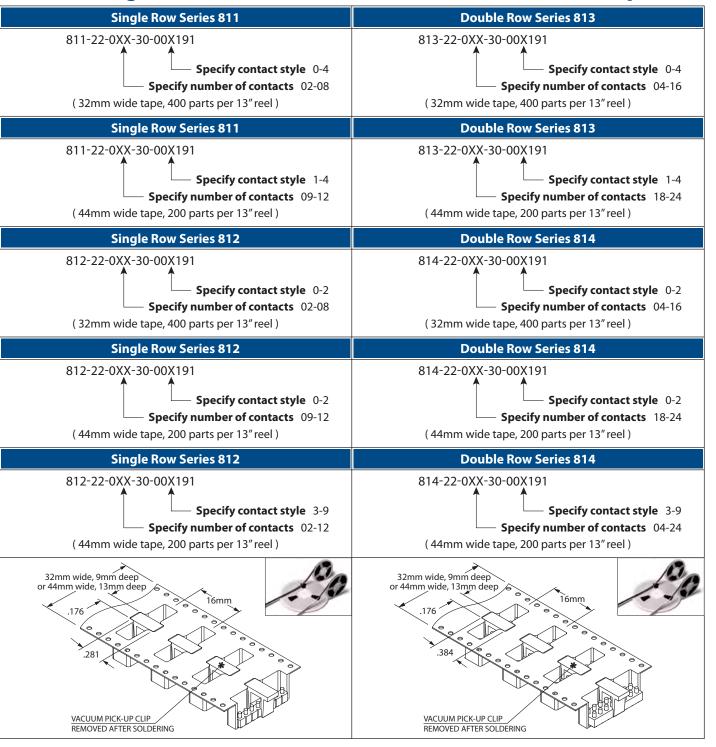
Contact resistance: $20m\Omega$ max. Insulation resistance: $10.000M\Omega$ min. Dielectric strength: 700Vrms min.

RoHS-2



SERIES 811, 812, 813, 814 • .100" GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

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





SERIES 815, 817, 819, 820 • .100" GRID SURFACE MOUNT • CARRIER TAPE AND PACKAGING

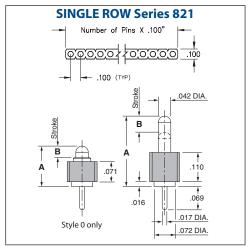
Ordering Information for Series 815/817/819/820 in Carrier Tape

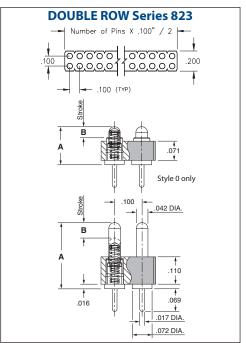
_	-
Single Row Series 815	Double Row Series 817
815-22-0XX-30-001191	817-22-0XX-30-001191
Specify number of pins 02-10	Specify number of pins 04-20
(44mm wide tape, 910 parts per 13" reel)	(44mm wide tape, 680 parts per 13" reel)
Single Row Series 819	Double Row Series 820
819-22-0XX-30-001191	820-22-0XX-30-001191
Specify number of pins 02-08	Specify number of pins 04-16
(32mm wide tape, 400 parts per 13" reel)	(32mm wide tape, 400 parts per 13" reel)
Single Row Series 819	Double Row Series 820
819-22-0XX-30-001191	820-22-0XX-30-001191
Specify number of pins 09-12	Specify number of pins 18-24
(44mm wide tape, 200 parts per 13" reel)	(44mm wide tape, 200 parts per 13" reel)
32mm wide, 9mm deep or 44mm wide, 13mm deep	32mm wide, 9mm deep or 44mm wide, 13mm deep



SERIES 821 & 823 • .100" GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS







- Modular contacts for use on .100" grid, available in five heights from .137" to .236", 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 \emptyset .030" \pm .003" plated through-holes in the circuit board prior to hand, wave or reflow soldering

ORDERING INFORMATION

	Single Row Series 82	1
	821-22-0XX-10-00X10	1
Specify number of contacts	02-64 —	Specify contact style 0-4
ı	Double Row Series 82	23
	823-22-0XX-10-00X10	1
Specify number of contacts	04-72	Specify contact style 0-4
CONTACT STYLE	INITIAL HEIGHT A	MAX. STROKE B
CONTACT STYLE 0	INITIAL HEIGHT A .137	MAX. STROKE B .039
CONTACT STYLE 0 1		
CONTACT STYLE 0 1 2	.137	.039
CONTACT STYLE 0 1 2 3	.137 .177	.039 .045

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu^{\prime\prime}$ gold over

100μ″ nickel

Spring: Beryllium copper-plated 10μ″ 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

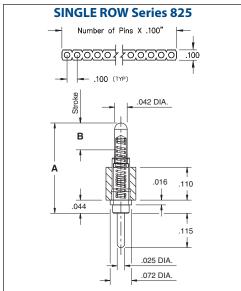
Contact resistance: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.

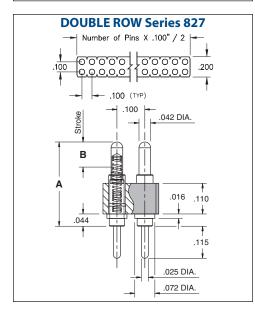




SERIES 825 & 827 • .100" GRID THROUGH-HOLE MOUNT, LONG STROKE • SINGLE AND DOUBLE ROW STRIPS







- Modular contacts for use on .100" grid, available in four heights from .302" to .392", 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 .045" mid. stroke and a .090" 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 \emptyset .038" ± .003" plated through-holes in the circuit board prior to hand, wave or reflow soldering

ORDERING INFORMATION

	Single Row Series 82	5	
	825-22-0XX-10-00X10	1	
Specify number of contacts	02-64	Specify contact style	1-4
	Double Row Series 82	27	
	827-22-0XX-10-00X10	1	
Specify number of contacts	†	1 - Specify contact style	1-4
Specify number of contacts CONTACT STYLE	†		1-4
· ·	04-72	- Specify contact style	1-4
· ·	04-72 INITIAL HEIGHT A	Specify contact style	· 1-4
1	04-72 INITIAL HEIGHT A .302	Specify contact style MAX. STROKE B .090	1-4

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu^{\prime\prime}$ gold over

|00μ″ nickel

Spring: Beryllium copper-plated $10\mu^{\prime\prime}\,gold$

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

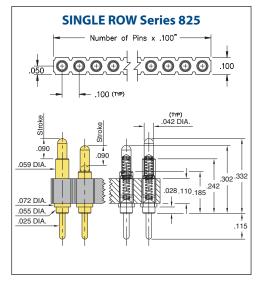
Contact resistance: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.

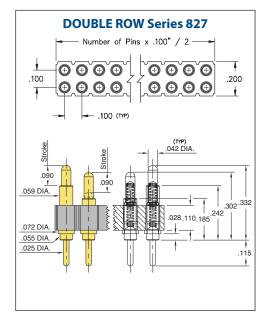




SERIES 825 & 827 • .100" GRID THROUGH-HOLE MOUNT, FIRST MATE/LAST BREAK • SINGLE AND DOUBLE ROW STRIPS

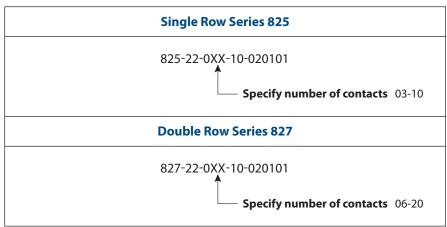






- Modular contacts for use on .100" grid, supplied in single and double row contact strips
- Taller pins in the end positions make contact first and break contact last to address applications where connection sequence is required
- Each pin has a full stroke capability of .090", allowing all pins to be compressed to the rated mid stroke while accounting for the .030" initial height offset of the 0914-1 (.332") and 0914-0 (.302")
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .045" mid. stroke and a .090" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- Insulators are high temperature thermoplastic

ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

. Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.045"): 60 grams

Durability: Up to 1,000,000 cycles

Coplanarity: .005" (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: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.

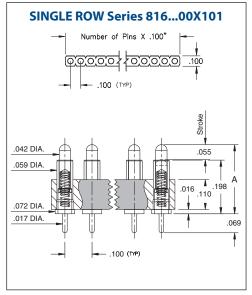


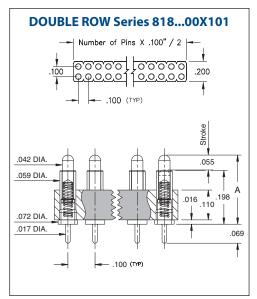


SPRING-LOADED CONI

SERIES 816 & 818 • .100" GRID THROUGH-HOLE MOUNT, MID PROFILE • SINGLE AND DOUBLE ROW STRIPS







- Modular contacts for use on .100" grid, available in ten heights from .255" to .430", 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 .0275" mid stroke & .055" 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 .030"±.003" plated through-holes in the circuit board prior to intrusive reflow soldering

ORDERING INFORMATION

	Single Row Seri	es 81600X101	
	816-22-0XX	-10-00X101	
Specify number of o	contacts 02-64	Specify	contact style 0-9
	Double Row Ser	ies 81800X101	
	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	.255	5	.350
1	.275	6	.370
2	.295	7	.390
3	.315	8	.410
4	.335	9	.430

Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height (A): 25 grams Spring force @ mid stroke (.0275"): 60 grams

Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

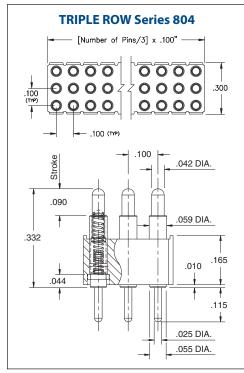
Contact resistance: $20m\Omega$ max. Insulation resistance: $10.000M\Omega$ min. Dielectric strength: 700Vrms min.

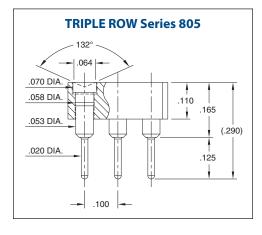




SERIES 804 & 805 • .100" GRID THROUGH-HOLE MOUNT • LONG STROKE TRIPLE ROW STRIPS AND MATING TARGET CONNECTORS

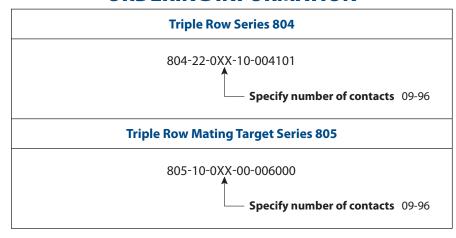






- Modular contacts for use on .100" grid, supplied in triple row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Spring pins have a .045" mid. stroke and a .090" max. stroke
- Low resistance, high current contacts are rated at 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 .038"±.003" 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 .042" dia. spring pin plungers

ORDERING INFORMATION



Technical Specifications for 804 Series

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.045"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

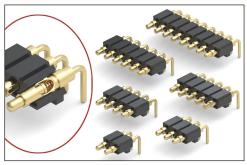
Contact resistance: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.





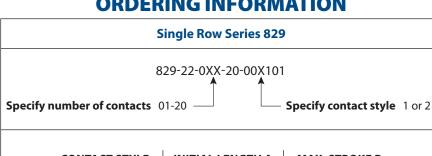
SPRING-LOADED CON

SERIES 829 • .100" GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS



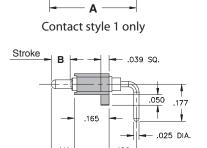
- Modular contacts for use on .100" grid. Supplied in single row strips with mounting pegs
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- · Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- · High temperature thermoplastic insulators are suitable for wave and reflow processes
- 829 series contact strips are designed for manual placement into Ø .037"±.003" plated through-holes in the circuit board prior to wave or reflow soldering

ORDERING INFORMATION



CONTACT STYLE	INITIAL LENGTH A	MAX. STROKE B
1	.415	.055
2	.406	.090

SINGLE ROW Series 829 Number of Pins x .100 .100 .100 (TYP) Stroke



.025 DIA.

Δ Contact style 2 only

Suggested P.C.B Footprint

Materials:

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

Technical Specifications

Spring: Beryllium copper-plated 10μ″ 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: $20m\Omega$ max. Insulation resistance: 10,000M Ω min. Dielectric strength: 700Vrms min.

Capacitance: 1pF max.





(2x) .057" MIN. MOUNTING HOLE

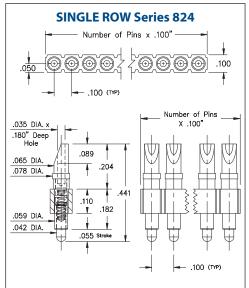
SP

SPRING-LOADED CONNECTORS

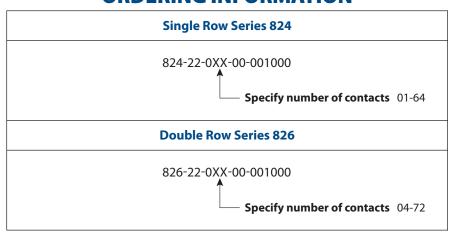
SERIES 824 & 826 • .100" GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

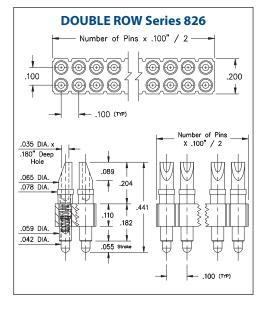


- $\bullet \ \ \text{Modular contacts for use on .100''} grid, supplied in single and double row contact strips$
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- · Insulators are high temperature thermoplastic
- Both 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



ORDERING INFORMATION





Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.0275"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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



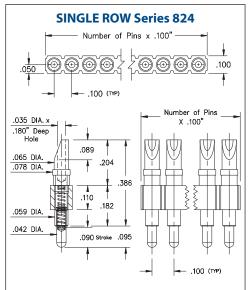


SPRING-LOADED CONI

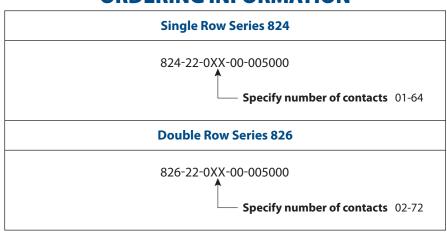
SERIES 824 & 826 • .100" GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS

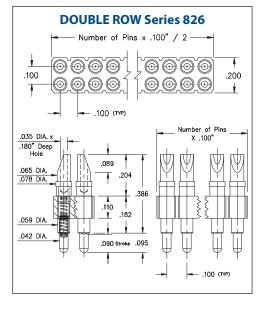


- Modular contacts for use on .100" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .045" mid. stroke and a .090" max. stroke
- · Low resistance, high current contacts are 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



ORDERING INFORMATION





Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.045"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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





SPRING-LOADED CON

SERIES 867 • .100" GRID WIRED CRIMP SPRING-LOADED CONNECTOR • SINGLE ROW STRIPS

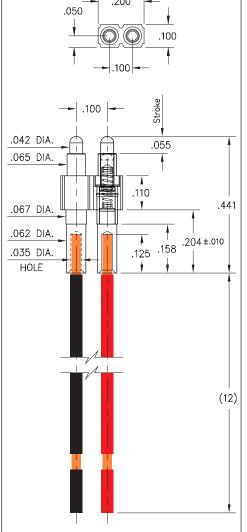


- **SINGLE ROW Series 867**
 - .441
- 867 series are spring loaded crimp connectors pre-wired with 24 AWG stranded conductors; one red, one black. The wire is per UL1007 with PVC insulation and 7/32 stranding. The ends are stripped to a length of .140" with slug on
- The connector design maintains the 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 .0275" mid. stroke and a .055" max. stroke
 - · Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
 - Insulators are high temperature thermoplastic, pin spacing is .100"

ORDERING INFORMATION

Single Row Wired Crimp Series 867

867-22-002-70-501010



Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.0275"): 60 grams Durability: Up to 1,000,000 cycles Wire retention: 8 pounds minimum

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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





SERIES 867 • .100" GRID WIRED CRIMP TARGET CONNECTOR • SINGLE ROW STRIPS



SINGLE ROW Series 867 .050 .100 .067 DIA .062 DIA. .204±.010 .158 .035 DIA. .125 HOLE (12)

- 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 .140" 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 .042" dia. spring pin plungers
- Insulators are high temperature thermoplastic, pin spacing is .100"

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: 10μ" Gold over Nickel

Insulator: High temperature Nylon 46, rated UL94 V-0

Mechanical:

Wire retention: 8 pounds minimum

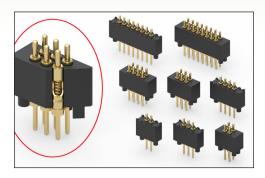
Electrical:

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

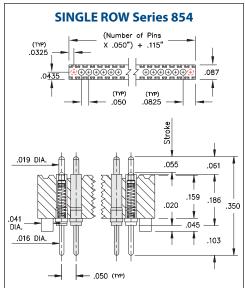




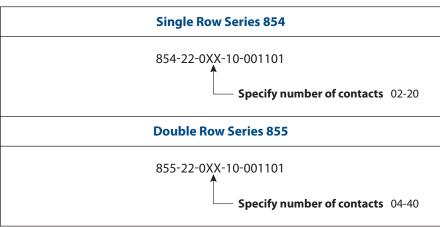
SERIES 854 & 855 • .050" GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS

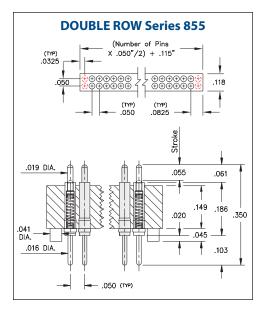


- $\bullet \ \ \text{Modular contacts for use on .050''} grid, supplied in single \ \text{and } \ double \ row \ contact \ strips$
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 854 & 855 series contact strips are designed for manual placement into Ø .025"±.003" plated through-holes in the circuit board prior to hand, wave or reflow soldering



ORDERING INFORMATION





Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10μ″ gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

Voltage rating: 100Vrms/150Vdc

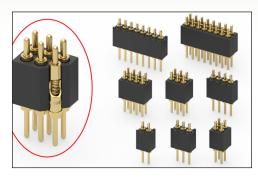
Current rating: 2A (continous), 3A (peak) per contact

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

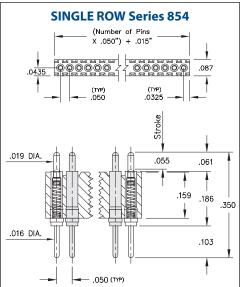




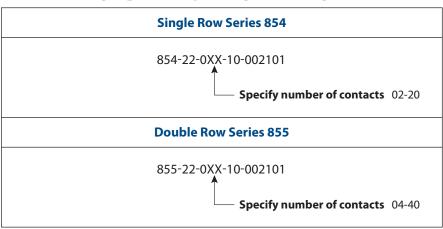
SERIES 854 & 855 • .050" GRID THROUGH-HOLE MOUNT • SINGLE AND DOUBLE ROW STRIPS WITHOUT STANDOFFS

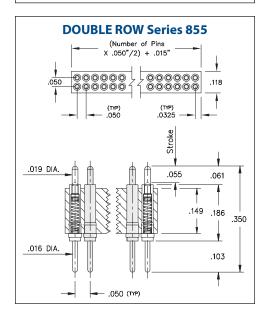


- $\bullet \ \ Modular \ contacts \ for \ use \ on \ .050'' grid, supplied \ in \ single \ and \ double \ row \ contact \ strips$
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for wave and reflow processes
- Both 854 & 855 series contact strips are designed for manual placement into Ø .025"±.003" plated through-holes in the circuit board prior to hand, wave or reflow soldering



ORDERING INFORMATION





Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

Voltage rating: 100Vrms/150Vdc

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

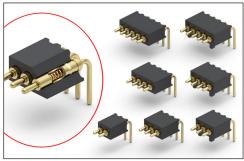
Contact resistance: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.





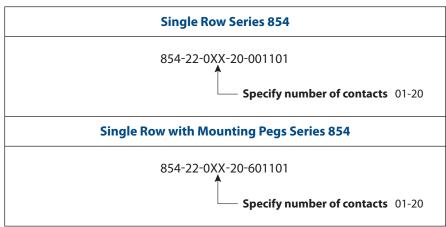
SPRING-LOADED CONI

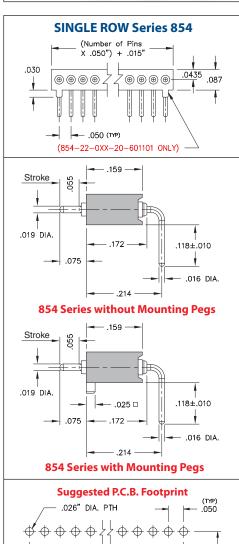
SERIES 854 • .050" GRID RIGHT ANGLE MOUNT • SINGLE ROW STRIPS



- Modular contacts for use on .050" 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 .0275" mid. stroke & .055" 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





Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10μ″ gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

.202

Voltage rating: 100Vrms/150Vdc

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

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

Capacitance: 1pF max.

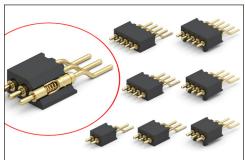




(2x) .040" MIN. MOUNTING HOLE

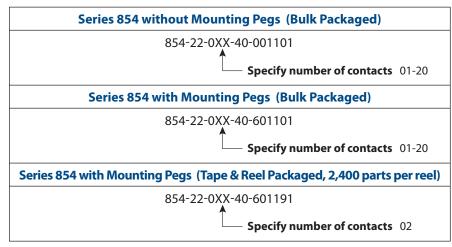
(854-22-0XX-20-601101 ONLY)

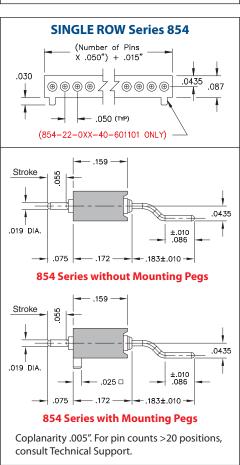
SERIES 854 • .050" GRID Z-BEND SURFACE MOUNT • SINGLE ROW STRIPS

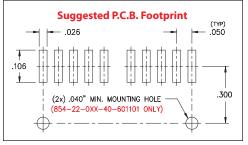


- Modular contacts for use on .050" grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a .0275" mid. stroke & .055" max. stroke
- Low resistance, 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

ORDERING INFORMATION







Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated $10\mu''$ gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

Voltage rating: 100Vrms/150Vdc

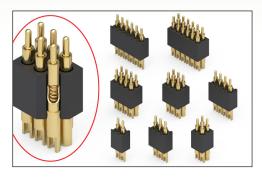
Current rating: 2A (continous), 3A (peak) per contact

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

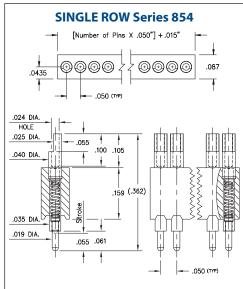




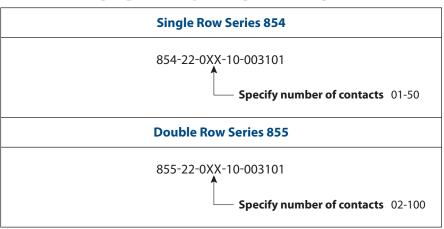
SERIES 854 & 855 • .050" GRID SOLDERCUP HEADER • SINGLE AND DOUBLE ROW STRIPS



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



ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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

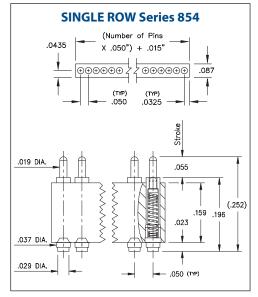


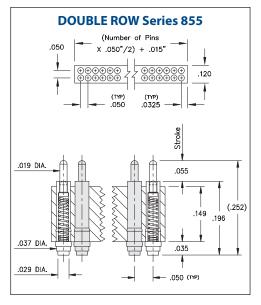


SPRING-LOADED CONI

SERIES 854 & 855 • .050" GRID SURFACE MOUNT, HIGH DENSITY • SINGLE AND DOUBLE ROW STRIPS

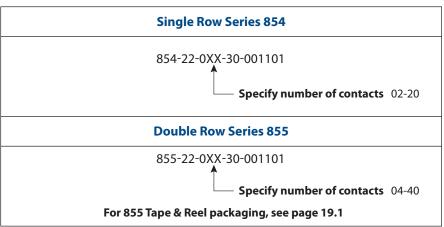






- Modular contacts for use on .050" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- 854 & 855 series contact strips are designed for manual placement onto .040" Ø solder pads
- 855 series is also available on tape & reel packaging, see page 19.1

ORDERING INFORMATION



Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10µ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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

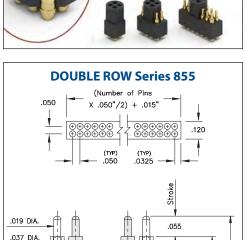




SPRING-LOADED CON

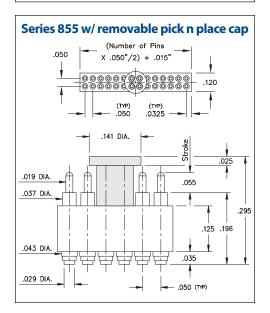
SERIES 855 • .050" GRID SURFACE MOUNT, HIGH DENSITY • **DOUBLE ROW STRIPS ON TAPE & REEL**





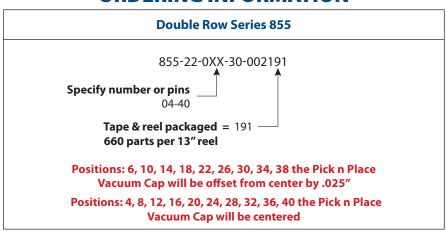
.043 DIA

.029 DIA



- Modular contacts for use on .050" grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 100,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- 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

ORDERING INFORMATION



Technical Specifications

Materials:

(.252)

.125 .196

.035

.050 (TYP)

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

Spring: Beryllium copper-plated 10μ″ gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

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

Electrical:

Voltage rating: 100Vrms/150Vdc

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

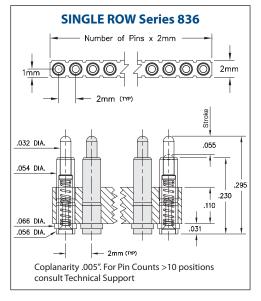
Contact resistance: $20m\Omega$ max. Insulation resistance: 10,000M Ω min. Dielectric strength: 700Vrms min.

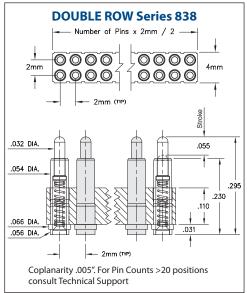




SERIES 836 & 838 • 2mm GRID SURFACE MOUNT • SINGLE AND DOUBLE ROW STRIPS

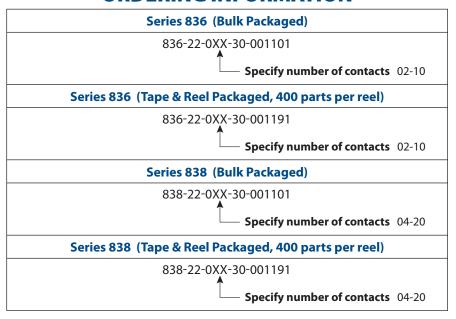






- Modular contacts for use on 2mm grid, available in single and double row contact strips with rated travel of .0275" and max. stroke of .055"
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance, high current contacts are rated at 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 .066"Ø solder pads

ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Stainless Steel-plated 10μ" gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.0275"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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





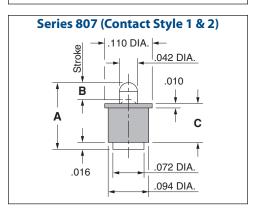
PAGE 19.3 | SPRING-LO

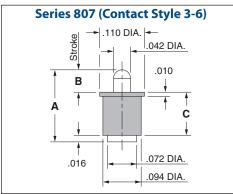
SPRING-LOADED CONNECTORS

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



- Discrete insulated spring-loaded pins; available in seven heights from .100" to .236", with rated travel from .012" to .0275"
- 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





ORDERING INFORMATION

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

Series 807 (Tape & Reel Packaged)

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

Technical Specifications

Materials:

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

Mechanical

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

Electrical:

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



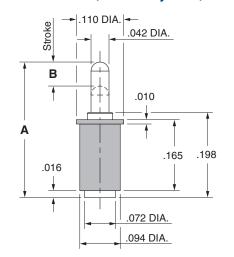


SERIES 807 • DISCRETE INSULATED SPRING-LOADED PINS • SURFACE MOUNT

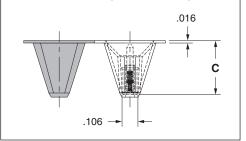


- Discrete insulated spring-loaded pins; available in ten heights from .255" to .430", with rated travel of .0275"
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature 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

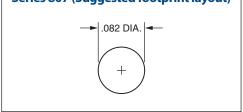
Series 807 (Contact Style 0-9)



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	.255	.0275	.045055	.285	750
1	.275	.0275	.045055	.285	750
2	.295	.0275	.045055	.326	600
3	.315	.0275	.045055	.326	600
4	.335	.0275	.045055	.361	550
5	.350	.0275	.045055	.361	550
6	.370	.0275	.045055	.401	475
7	.390	.0275	.045055	.401	475
8	.410	.0275	.045055	.441	430
9	.430	.0275	.045055	.441	430

Technical Specifications

Materials:

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

Mechanical:

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

Electrical:

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

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

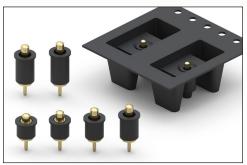




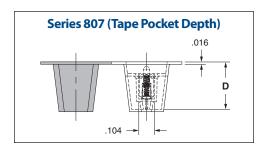
PAGE 19.5

SPRING-LOADED CONNECTORS

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



- with rated to
 Precision-macycle life due
 Low resistant
 High temper
- Discrete insulated spring-loaded pins; available in six heights from .137" to .236", with rated travel of .0195" & .0275"
 - 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



.072 DIA.

.094 DIA.

ORDERING INFORMATION



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

Technical Specifications

Materials:

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

Mechanical:

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

Electrical:

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



Specify contact style 1-6



Dielectric strength: 700Vrms min.

SPRING-LOADED CONI

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



Series 807 (Contact Style 0)

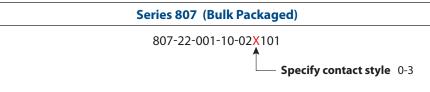
- Discrete insulated spring-loaded pins; available in four heights from .274" to .364", with rated travel of .045"
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Low resistance contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for most soldering processes
- 807 series, contact styles 0 through 3, are packaged in bulk. See below for ordering information

.110 DIA. Stroke 042 DIA. В A .010 C .016 .028 .025 DIA.

.072 DIA. .094 DIA.

.115

ORDERING INFORMATION



Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)
0	.274	.045	.085090	.165
1	.304	.045	.085090	.165
2	.334	.045	.085090	.165
3	.364	.045	.085090	.165

Series 807 (Contact Style 1 - 3) 110 DIA. .042 DIA. В .059 DIA. Α .010 C .016 .028 .025 DIA. .115 .072 DIA. .094 DIA.

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel Spring (Contact style 0-3): Beryllium copper-plated 10μ" 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: $20m\Omega$ max.

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



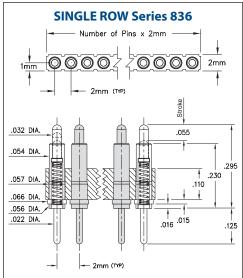


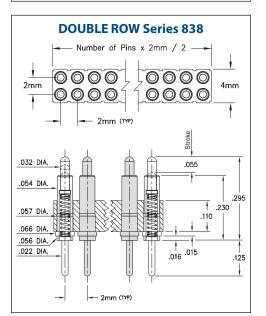
SPRING-LOADED CONI

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

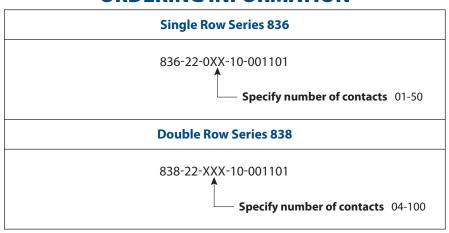


- Modular contacts for use on 2mm grid, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability
- Pistons have a .0275" mid. stroke and a .055" max. stroke
- Low resistance, high current contacts are rated 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 .033"±.003" plated through-holes in the circuit board prior to soldering





ORDERING INFORMATION



Technical Specifications

Materials:

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

Spring: Beryllium copper-plated 10μ″ gold

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Spring force @ initial height: 25 grams Spring force @ mid stroke (.0275"): 60 grams Durability: Up to 1,000,000 cycles

Electrical:

Voltage rating: 100Vrms/150Vdc

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

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

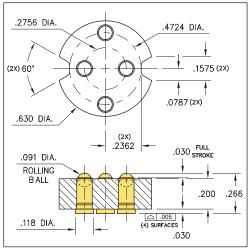
Capacitance: 1pF max.

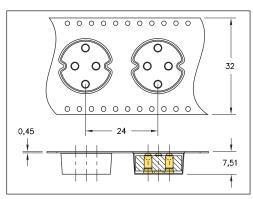


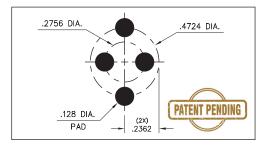


SERIES 945 • OMNIBALL™ CIRCULAR SPRING-LOADED CONNECTOR • SURFACE MOUNT









- 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 .015" mid. stroke and a .030" 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 .128"Ø 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 $20\mu''$ gold over $100\mu''$ nickel

Spring: Beryllium copper-plated 10µ" gold Insulator: Machined Fr-4 Epoxy, rated UL94 V-0

Mechanical:

Spring force @ initial height: 30 grams Spring force @ mid stroke (.015"): 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: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min. Dielectric strength: 700Vrms min.

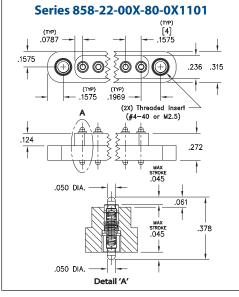
Capacitance: 1pF max.

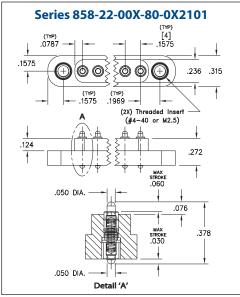




SERIES 858 • 4MM GRID RUGGED DUAL PLUNGER SOLDERLESS CONNECTOR



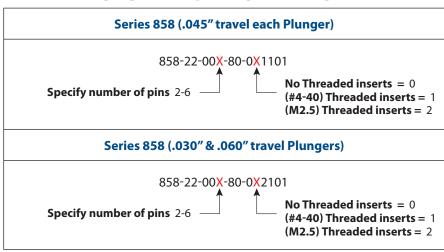




- Rugged Modular contacts for use on 4mm grid, supplied in 2 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability (Rated @ Mid-Stroke)
- Low resistance, high current contacts are rated at 9 amps @ 10°C Temperature rise
- Designed 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 .045" max. travel individually or simultaneously.

 Maximum combined stroke of both plungers is .090" per spring pin
- Series 858-22-00X-80-0X2101 connectors are designed with dual action plungers.
 One plunger is capable of achieving a .030" max. travel and the other is capable of achieving a .060" max. travel. Plungers can achieve their max. travel individually or simultaneously. Maximum combined stroke of both plungers is .090" per spring pin
- See Catalog page 19.74 for assemblies with Alignment pegs

ORDERING INFORMATION



Technical Specifications

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring: Stainless Steel 302

Insulator: High temperature thermoplastic, rated UL94 V-0

Mechanical:

Materials:

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: $20m\Omega$ max. (Rated @ Mid-Stroke)

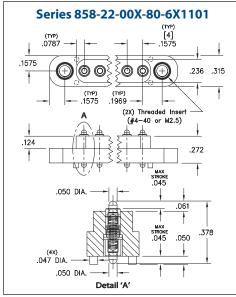
Insulation resistance: $10.000M\Omega$ min.

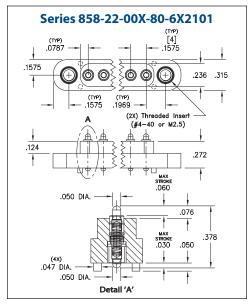




SERIES 858 • 4MM GRID RUGGED DUAL PLUNGER SOLDERLESS CONNECTOR WITH ALIGNMENT PEGS

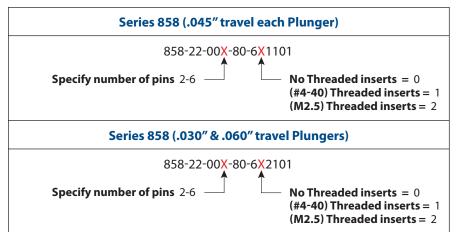






- Rugged Modular contacts for use on 4mm grid, supplied in 2 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability (Rated @ Mid-Stroke)
- Low resistance, high current contacts are rated at 9 amps @ 10°C Temperature rise
- Designed 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 .045" max. travel individually or simultaneously. Maximum combined stroke of both plungers is .090" per spring pin
- Series 858-22-00X-80-6X2101 connectors are designed with dual action plungers.
 One plunger is capable of achieving a .030" max. travel and the other is capable of achieving a .060" max. travel. Plungers can achieve their max. travel individually or simultaneously. Maximum combined stroke of both plungers is .090" per spring pin
- See Catalog page 19.73 for assemblies without Alignment pegs

ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ 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:

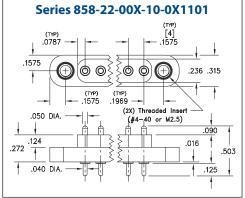
Current rating: 9A @ 10° C Temp. rise above ambient (20°C) Contact resistance: $20m\Omega$ max. (Rated @ Mid-Stroke) Insulation resistance: $10.000M\Omega$ min.

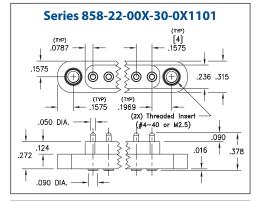
RoHS-2 2011/65/EU

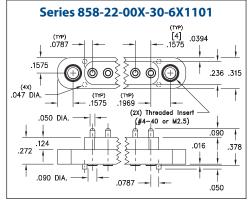


SERIES 858 • 4MM GRID RUGGED CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT



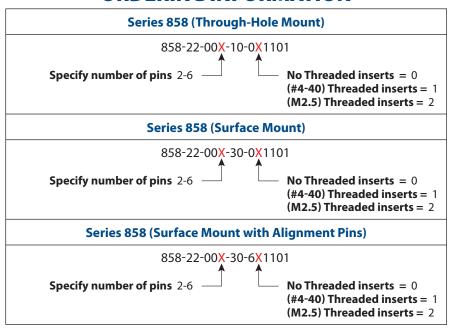






- Rugged Modular contacts for use on 4mm grid, supplied in 2 6 position connectors
- Precision-machined piston / base and gold-plated components assure up to 1,000,000 cycle life durability. Pistons have a .045" mid. stroke and a .090" max. stroke
- Mounting tabs provide a means for secure attachment 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 .052"±.003" 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 .100" \varnothing solder pads

ORDERING INFORMATION



Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ 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)

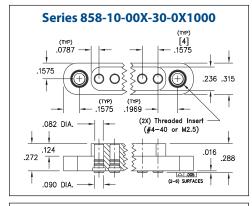
Contact resistance: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min.

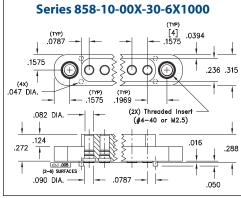




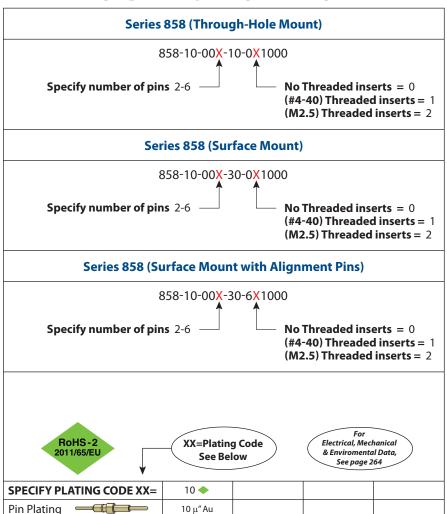
SERIES 858 • 4MM GRID RUGGED FLAT FACE TARGET CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT







- 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 .052"±.003" 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 .100" Ø minimum solder pads

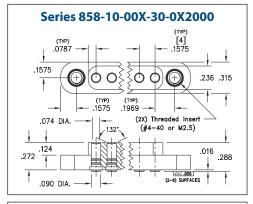


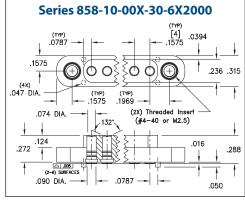


SERIES 858 • 4MM GRID RUGGED CONCAVE FACE TARGET CONNECTOR • SURFACE MOUNT AND THROUGH HOLE MOUNT

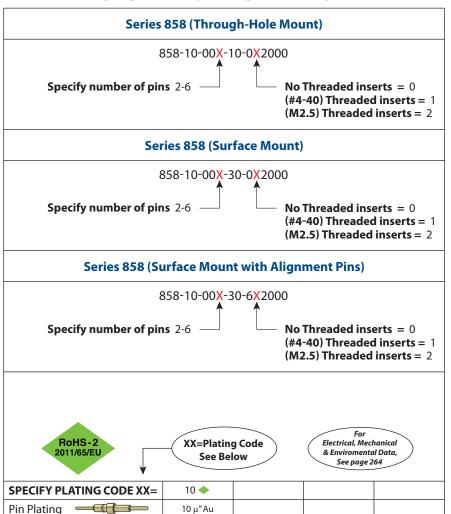


Series 858-10-00X-10-0X2000 (TYP) (14) (1575 (1575 (1969 (14) (1575 (1969 (14) (1575 (1969 (14) (1575 (1969 (14) (1575





- 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 .052"±.003" 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 .100" \emptyset minimum solder pads



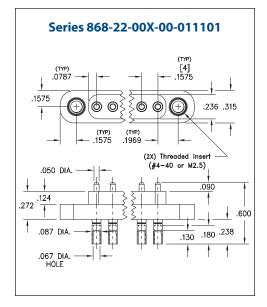


SPRING-LOADED CO

SERIES 868 • 4MM GRID RUGGED CONNECTORS • SOLDERCUP TERMINATION

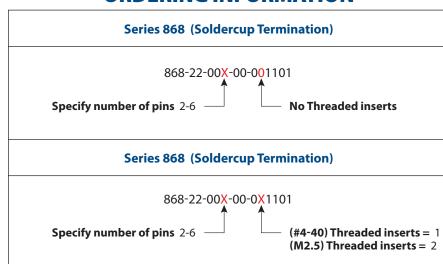


Series 868-22-00X-00-001101 1575 .236 .315 .124 .272 .087 DIA .180 .238 130 .067 DIA



- 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 .045" mid. stroke and a .090" 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



Technical Specifications

Materials:

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

Spring: Stainless Steel 302 plated 10μ" 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)

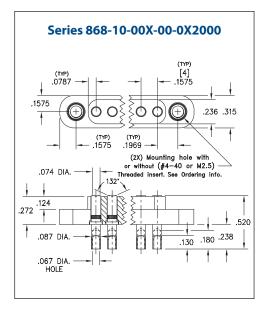
Contact resistance: $20m\Omega$ max. Insulation resistance: $10.000M\Omega$ min.



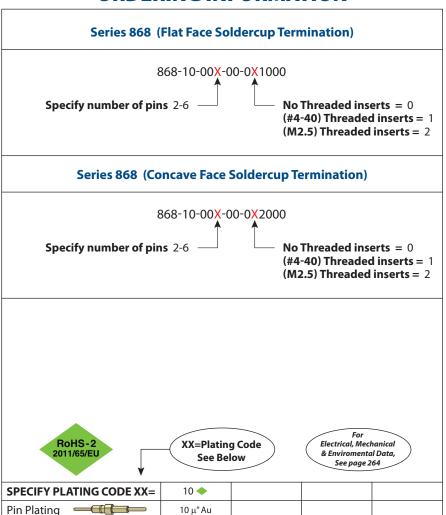


SERIES 868 • 4MM GRID RUGGED TARGET CONNECTORS FLAT & CONCAVE FACE • SOLDERCUP TERMINATION





- 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

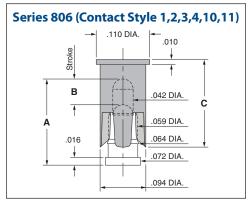


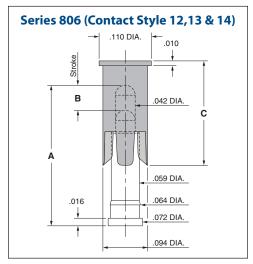


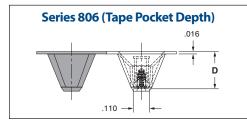
SPRING-LOADED CONI

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









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

ORDERING INFORMATION

Series 806 (Tape & Reel Packaged)

806-22-001-30-0XX191

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

Contact Style	Initial Height (A)	Rated Travel	Full Stroke Range (B)	Sleeve Height (C)	Tape Depth (D)	Quantity per Reel
1	.137	.0195	.030039	.180	.252	780
2	.155	.0195	.030039	.180	.252	780
3	.177	.0275	.050055	.180	.252	780
4	.197	.0275	.050055	.180	.252	780
10	.217	.0275	.050055	.220	.285	750
11	.236	.0275	.050055	.220	.285	750
12	.255	.0275	.050055	.220	.361	550
13	.275	.0275	.050055	.220	.361	550
14	.295	.0275	.050055	.220	.361	550

Technical Specifications

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

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

Mechanical:

Materials:

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: $20m\Omega$ max.

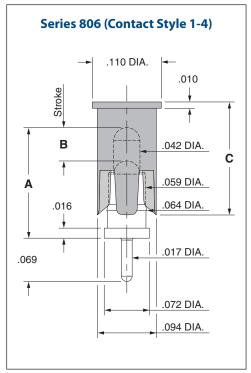
Insulation resistance: $10.000M\Omega$ min.

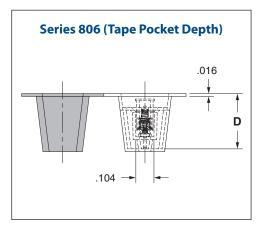




SERIES 806 • REMOVABLE PICK & PLACE CAP, SPRING-LOADED PINS • THROUGH-HOLE MOUNT







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

ORDERING INFORMATION

Series 806 (Tape & Reel Packaged)

806-22-001-10-00<mark>X</mark>191

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	.137	.0195	.030039	.180	.317	640
2	.155	.0195	.030039	.180	.317	640
3	.177	.0275	.050055	.180	.317	640
4	.197	.0275	.050055	.180	.317	640

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated $20\mu''$ gold over $100\mu''$ nickel

Spring (Contact style 1-4): Beryllium copper-plated $10\mu''$ 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

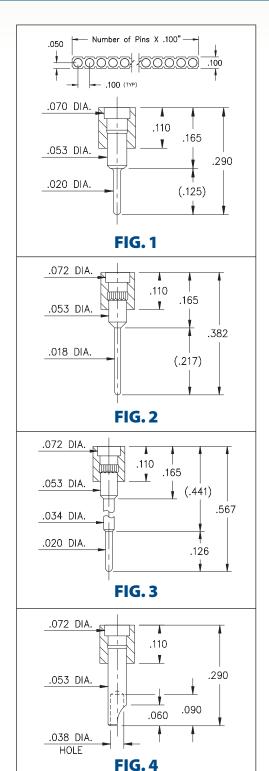
Contact resistance: $20m\Omega$ max. Insulation resistance: $10,000M\Omega$ min.





SPRING-LOADED CONI

SERIES 319, 330 • .100" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

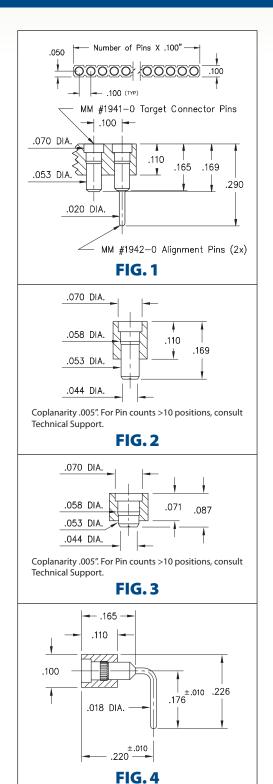


- Series 319 and 330 Spring Target Connectors, supplied in single row strips. Available in through-hole and wire termination configurations
- · Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard .042" dia. spring pin plungers
- Target connectors use MM #1938, #1940, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic

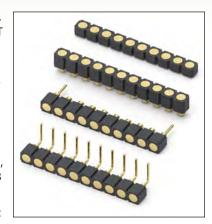


ONDERING IN ORMATION			
	Series 319001	Standard Solder Tails	
FIG. 1	319-10-1	00-001000	
	Specify number of pins	01-64	
	Series 319002	Long Solder Tails	
FIG. 2	319-10-1	00-002000	
	Specify number of pins	01-64	
	Series 319005	Elevated with Solder Tails	
FIG. 3	319-10-1_	00-005000	
	Specify number of pins	01-64	
	Series 330240	Solder Cups	
FIG. 4	330-10-1	00-240000	
	Specify number of pins	01-64	
ROHS-2 2011/65/EU XX=Plating Code See Below Electrical, Mechanical & Environmental Data, See page 264			
SPECIFY PLATIN	NG CODE XX= 10 ◆		
Pin Plating =	10 μ" Au		

SERIES 319, 399 • .100" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS



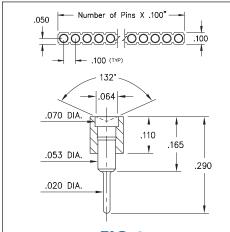
- Series 319 and 399 Spring Target Connectors, supplied in single row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard .042" 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



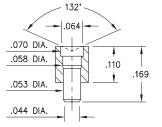
	Series 319041 Su	rrface Mount w/ Alignments Pins		
FIG. 1	319-10	-130-041000 ^		
	Specify number of pin	s 03-64		
	Series 319008	Surface Mount		
FIG. 2	319-10	-130-008000 •		
	Specify number of pin	s 01-64		
	Series 319054	Low Profile Surface Mount		
FIG. 3	319-10	-130-054000 •		
	Specify number of pin	s 01-64		
	Series 399008	Right Angle Solder Tails		
FIG. 4	399-10	-110-008000 ^		
	Specify number of pin	s 01-64		
RoHS-2 2011/65/EU XX=Plating Code See Below For Electrical, Mechanical & Environmental Data, See page 264				
	SPECIFY PLATING CODE XX= 10 ◆			
Pin Plating =	10 μ" Au			



SERIES 319, 399 • .100" GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

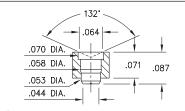






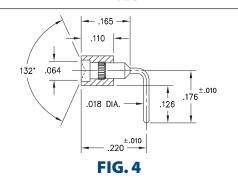
Coplanarity .005". For Pin counts >10 positions, consult Technical Support.

FIG. 2



Coplanarity .005". For Pin counts >10 positions, consult Technical Support.

FIG. 3



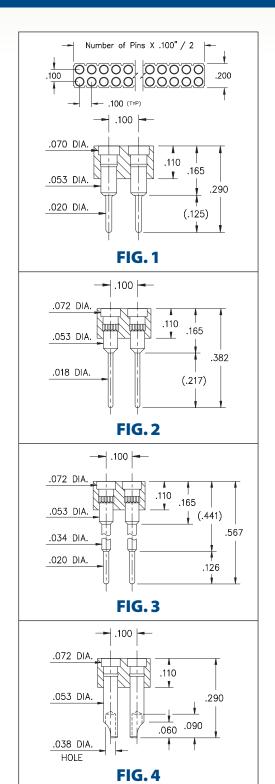
- Series 319 and 399 Spring Target Connectors, supplied in single row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard .042" 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



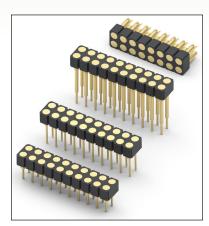
	Series 319006	Standard Solder Tails	
FIG. 1	319-10-1_	00-006000	
	Specify number of pins	01-64	
	Series 319007	Surface Mount	
FIG. 2	319-10-1_	30-007000	
	Specify number of pins	01-64	
	Series 319055	Low Profile Surface Mount	
FIG. 3	319-10-1_	30-055000	
	Specify number of pins	01-64	
	Series 399007	Right Angle Solder Tails	
FIG. 4	399-10-1_	10-007000	
	Specify number of pins	01-64	
ROHS-2 2011/65/EU XX=Plating Code See Below Electrical, Mechanical & Environmental Data, See page 264			
	SPECIFY PLATING CODE XX= 10 ◆		
Pin Plating =	10 μ" Au		



SERIES 419, 430 • .100" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS



- 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 goldplated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard .042" dia. spring pin plungers
- Target connectors use MM #1938, #1940, #1942 and #3024 pins. See page 218 for details
- Insulators are high temperature thermoplastic

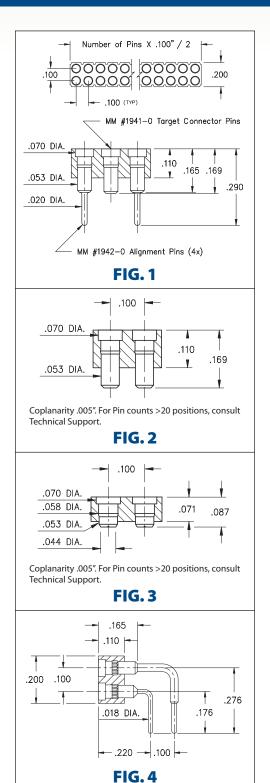


	Series 419001	Standard Solder Tails	
FIG. 1	419-10-200-001000		
	Specify number of pins	04-64	
	Series 419002	Long Solder Tails	
FIG. 2	419-10-2	00-002000	
	Specify number of pins	04-64	
	Series 419005	Elevated with Solder Tails	
FIG. 3	419-10-2	00-005000	
	Specify number of pins	04-64	
	Series 430240	Solder Cups	
FIG. 4	430-10-2	00-240000	
	Specify number of pins	04-64	
ROHS-2 2011/65/EU XX=Plating Code See Below For Electrical, Mechanical & Environmental Data, See page 264			
SPECIFY PLATIN	NG CODE XX= 10 ◆		
Pin Plating =	10 μ" Au		



SPRING-LOADED CO

SERIES 419, 499 • .100" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS

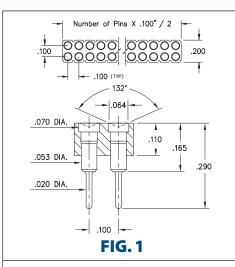


- · Series 419 and 499 Spring Target Connectors, supplied in double row strips. Available in SMT and right angle through-hole termination configurations
- · Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard .042" 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



	Series 419042 Sur	face Mount w/ Alignments Pins	
	Jenes 419042 Jul	race Mount W/ Anginnents Fins	
FIG. 1	419-10-2	230-042000	
	Specify number of pins	06-72	
	Series 419041	Surface Mount	
FIG. 2	419-10-2	230-041000	
	Specify number of pins	04-72	
	Series 419054	Low Profile Surface Mount	
FIG. 3	419-10-2	230-054000	
	Specify number of pins	04-72	
	Series 499008	Right Angle Solder Tails	
FIG. 4	499-10-2	210-008000	
	Specify number of pins	02-64	
RoHS - 2 2011/65/EU XX=Plating Code See Below For Electrical, Mechanical & Environmental Data, See page 264			
SPECIFY PLATIN	NG CODE XX= 10 ◆		
Pin Plating =	10 μ" Au		

SERIES 419, 499 • .100" GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • DOUBLE ROW STRIPS



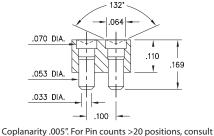
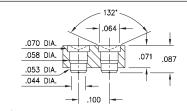


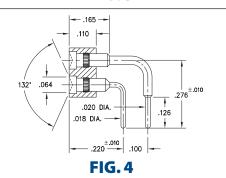
FIG. 2

Technical Support.

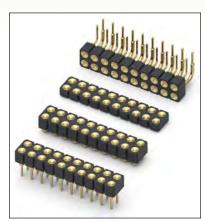


Coplanarity .005". For Pin counts >20 positions, consult Technical Support.

FIG. 3



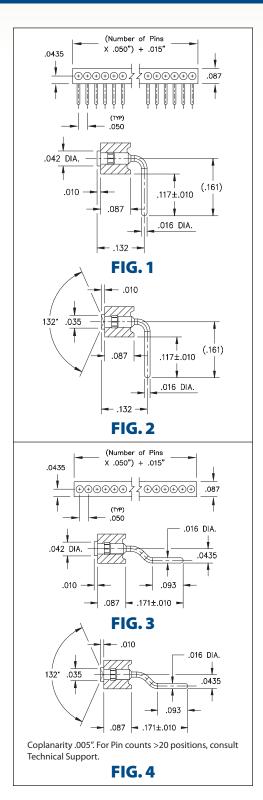
- Series 419 and 499 Spring Target Connectors, supplied in double row strips. Available in SMT and right angle through-hole termination configurations
- Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard .042" 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



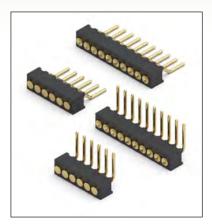
	Series 419006	Standard Solder Tails	
FIG. 1	419-10-2	200-006000	
	Specify number of pins	04-64	
	Series 419007	Surface Mount	
FIG. 2	419-10-2	230-007000	
	Specify number of pins	04-72	
	Series 419055	Low Profile Surface Mount	
FIG. 3	419-10-2	230-055000	
	Specify number of pins	04-72	
	Series 499007	Right Angle Solder Tails	
FIG. 4	499-10-2	210-007000	
	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 =	10 μ" Au		



SERIES 856 • .050" GRID FLAT & CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS

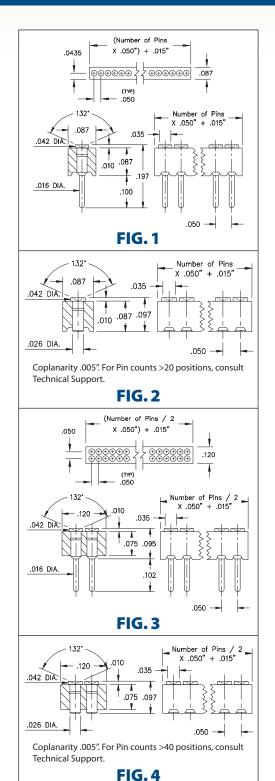


- Series 856 Spring Target Connectors, supplied in single row strips
- Spring Target Connectors are offered with a flat or concave surface for making contact with our standard .019" dia. spring pin plungers. The target connectors provide an excellent gold-plated conductive path back to the board-mounted spring pin connector
- Target connectors use MM #1831-1 and #1931-1 pins. See page 223.2 for details
- Insulators are high temperature thermoplastic

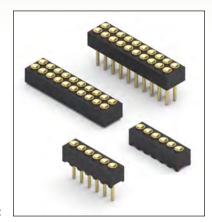


	Series 85620-001	Flat face / Right Angle			
	Series 65020-001	Flat lace / Right Aligie			
FIG. 1	856-10-0	20-001000			
	Specify number of pins	01-20			
	Series 85620-002	Concave face / Right Angle			
FIG. 2	856-10-0	20-002000			
	Specify number of pins	01-20			
	Series 85640-001	Flat face / Surface Mount			
FIG. 3	856-10-0	40-001000			
	Specify number of pins	01-20			
	Series 85640-002	Concave face / Surface Mount			
FIG. 4	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 PLATIN	SPECIFY PLATING CODE XX= 10 ◆				
Pin Plating =	10 μ" Au				

SERIES 856, 857 • .050" GRID CONCAVE FACE TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS



- Series 856 and 857 Target Connectors, SMT & through-hole, supplied in single and double row strips
- Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a concave face for making contact with our standard .019" dia. spring pin plungers
- Target connectors use MM #1934 (throughhole) and #1936 (surface mount) pins. See page 223.2 for details
- Insulators are high temperature thermoplastic

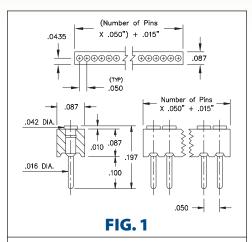


	Series 85610-002	Concave face / Solder Tails		
FIG. 1	856-10-	010-002000		
	Specify number of pins	01-20		
	Series 85630-002	Concave face / Surface Mount		
FIG. 2	856-10-	030-002000		
	Specify number of pins	02-20		
	Series 85710-002	Concave face / Solder Tails		
FIG. 3	857-10-	010-002000		
	Specify number of pins	04-40		
	Series 85730-002	Concave face / Surface Mount		
FIG. 4	857-10-	030-002000		
	Specify number of pins	04-40		
RoHS-2 2011/65/EU XX=Plating Code See Below For Electrical, Mechanical & Environmental Data, See page 264				
	SPECIFY PLATING CODE XX= 10 ◆			
Pin Plating =	10 μ" Au			



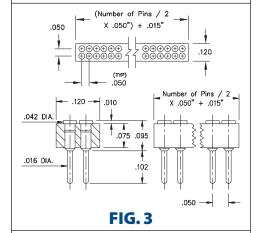
SPRING-LOADED CONNE

SERIES 856, 857 • .050" GRID TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE AND DOUBLE ROW STRIPS



- Number of Pins .042 DIA .087 .097 .010 .026 DIA. Coplanarity .005". For Pin counts >20 positions, consult
 - FIG. 2

Technical Support.



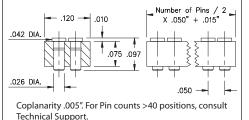
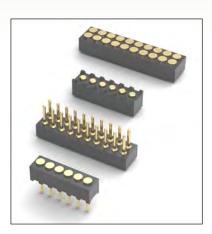


FIG. 4

- Series 856 and 857 Target Connectors, SMT & through-hole, supplied in single and double row strips
- · Target Connectors provide an excellent goldplated conductive mating surface for spring loaded connectors. These series are offered with a flat face for making contact with our standard .019" dia. spring pin plungers
- Target connectors use MM #1933 (throughhole) and #1935 (surface mount) pins. See page 223.2 for details
- Insulators are high temperature thermoplastic



	Series 856051	Flat face / Solder Tails		
FIG. 1	856-10-01	0-051000		
	Specify number of pins	— 01-20		
	Series 856051	Flat face / Surface Mount		
FIG. 2	856-10-03	0-051000		
	Specify number of pins	— 02-20		
	Series 857051	Flat face / Solder Tails		
FIG. 3	857-10-01	0-051000		
	Specify number of pins	— 04-40		
	Series 857051	Flat face / Surface Mount		
FIG. 4	857-10-03	0-051000		
	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 =	10 μ" Au			



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

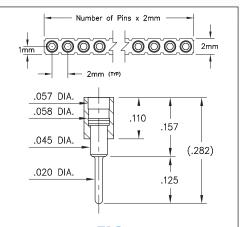


FIG. 1

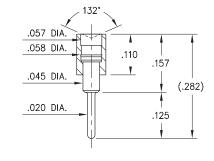
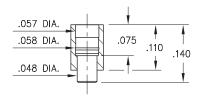
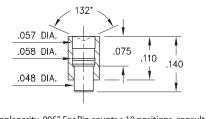


FIG. 2



Coplanarity .005". For Pin counts >10 positions, consult Technical Support.

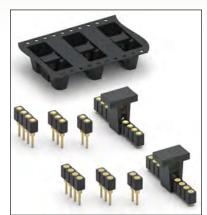
FIG. 3



Coplanarity .005" 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 goldplated conductive path back to the boardmounted 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 .032" diameter plungers
- Target connectors use MM #1949, #1950, #1951, and #1952 pins. See page 223.1 for details
- Insulators are high temperature thermoplastic



	Series 830003	Flat face / Solder Tails		
FIG. 1	830-10-010-003000			
	Specify number of pins	01-20		
	Series 830004	Concave face / Solder Tails		
FIG. 2	830-10-010-004000			
	Specify number of pins	01-20		
	Series 83030-003	Flat face / Surface Mount		
	830-10-0	030-003 <u>XXX</u>		
FIG. 3	Specify number or pins _ 02-10			
	Tube packag			
	Tape & reel packag 400 parts per 13" re			
	Series 83030-004	Concave face / Surface Mount		
) -30-004XXX		
	Specify number or pins	\uparrow		
FIG. 4	02-10			
	Tube packag			
	Tape & reel packaged = 191 400 parts per 13" reel			
For				
ROHS-2 2011/65/EU XX=Plating Code See Below Electrical, Mechanical & Environmental Data, See page 264				
SPECIFY PLATIN	SPECIFY PLATING CODE XX= 10 ◆			
Pin Plating 💳	Pin Plating 10 μ" Au			



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

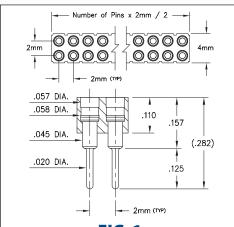
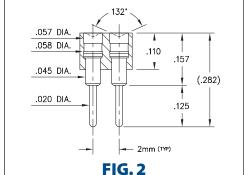
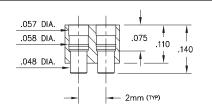


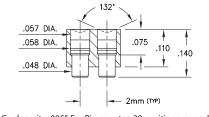
FIG. 1





Coplanarity .005". For Pin counts >20 positions, consult Technical Support.

FIG. 3



Coplanarity .005". For Pin counts >20 positions, consult Technical Support.

FIG. 4

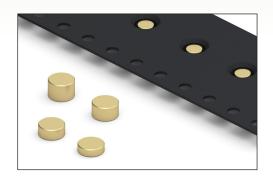
- Series 832 2mm Spring Target Connectors, supplied in double row strips
- Target connectors provide an excellent goldplated conductive path back to the boardmounted spring pin connector. Available in both through-hole and SMT terminations with the choice of either flat or concave face contact surfaces. Concave face targets provide additional surface area for mating with our standard .032" diameter plungers
- Target connectors use MM #1949, #1950, #1951, and #1952 pins. See page 223.1 for details
- Insulators are high temperature thermoplastic

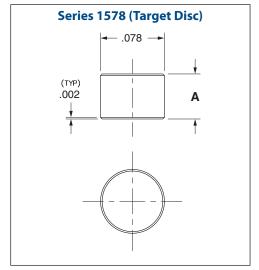


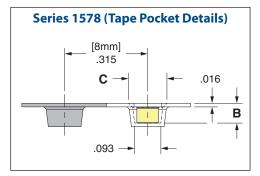
	Series 832003	Flat face / Solder Tails				
FIG. 1	832-10-010-003000					
	Specify number of pins	04-20				
	Series 832004	Concave face / Solder Tails				
FIG. 2	832-10-0	10-004000				
	Specify number of pins 04-20					
	Series 83230-003	Flat face / Surface Mount				
	832-10-0	30-003 <u>XXX</u>				
FIG. 3	Specify number or pins04-20					
	Tube packaged = 000					
	Tape & reel packaged = 191 400 parts per 13" reel					
	Series 83230-004	Concave face / Surface Mount				
-		-30-004XXX				
	<u></u>					
FIG. 4	Specify number or pins					
	Tube package					
	Tape & reel packaged = 191 400 parts per 13" reel					
		CI CI				
ROHS - 2 2011/65/EU XX=Plating Code See Below For Electrical, Mechanical & Enviromental Data, See page 264						
SPECIFY PLATIN	G CODE XX = 10 ◆					
Pin Plating	G CODE XX= 10 μ" Au					

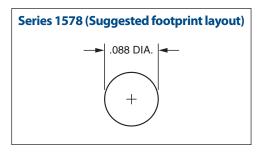


SERIES 1578 • LOW PROFILE TARGET DISCS • SURFACE MOUNT









- The 1578-X-57-15-00-00-03-0 Surface mount disc is .078" in diameter and available in four heights from .025" to .055" +/-.002" 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)	

		• • • •	Opening (C)	per Reel
0	.025	.035	.120	7,200
1	.035	.045	.130	6,000
2	.045	.055	.131	5,125
3	.055	.065	.133	4,000
	,(XX=Plating Code See Below	Electri & Envi	For ical, Mechanical iromental Data, see page 264

Pin Plating 10 μ" Au SPECIFICATIONS:

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

Dimensions: Inches

Tolerances On: Lengths: $\pm .002$

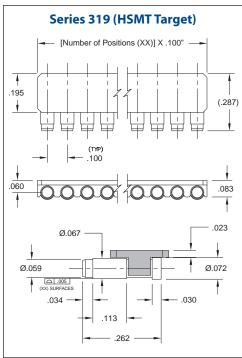
Diameters: $\pm .001$ Angles: $\pm 2^{\circ}$

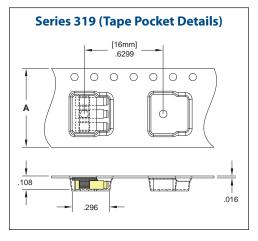




SERIES 319 • .100" GRID HSMT TARGET CONNECTORS FOR SPRING-LOADED ASSEMBLIES • SINGLE ROW STRIPS







- 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 .042" 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 .100" 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

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

XX=Plating Code

See Below

Technical Specifications

Materials:

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

Pin Finish: 10μ" Gold over Nickel

Insulator: High temperature Nylon 46, rated UL94 V-0

Electrical:

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

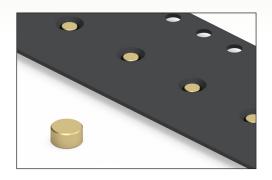


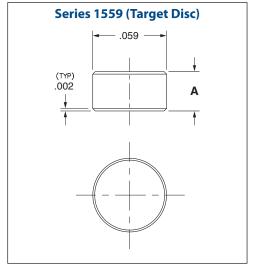
Electrical, Mechanical & Enviromental Data.

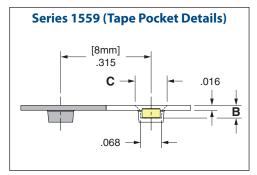
See page 264

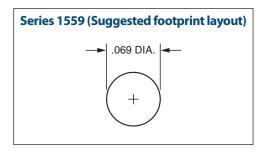


SERIES 1559 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



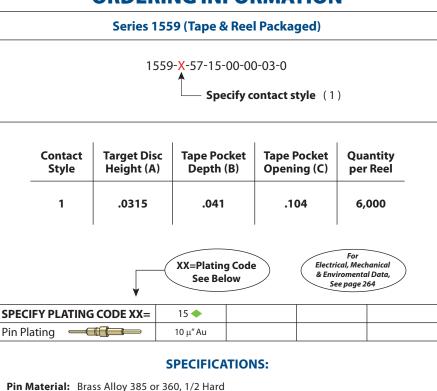






- The 1559-1-57-15-00-00-03-0 Surface mount disc is .059" in diameter. Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for surface mount soldering and as the conductive mating surface for spring 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





Angles:

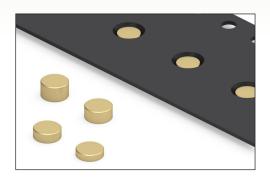
±.002

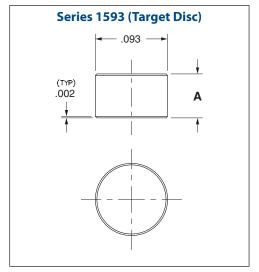
 \pm 2 $^{\circ}$

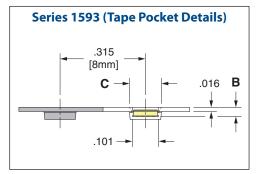
Diameters: ±.001

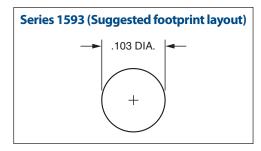
Dimensions: Inches Tolerances On: Lengths:

SERIES 1593 • LOW PROFILE TARGET DISCS • SURFACE MOUNT



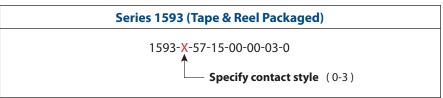






- The 1593-X-57-15-00-00-03-0 Surface mount disc is .093" in diameter and available in four heights from .025" to .055" +/-.002" tall.
 - Employing our precision machining expertise we are able to achieve flat surfaces on both sides of the disc with virtually no burrs. The flat surfaces are ideal for 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



Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	.025	.035	.123	7,200
1	.035	.045	.124	6,000
2	.045	.055	.124	5,125
3	.055	.065	.124	4,000
	<u> </u>	XX=Plating Code See Below	/ & Env	For ical, Mechanical iromental Data, tee page 264

SPECIFY PLATING CODE XX=	15 🔷		
Pin Plating	10 μ" Au		

SPECIFICATIONS:

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

Dimensions: Inches

Tolerances On: Lengths: $\pm .002$

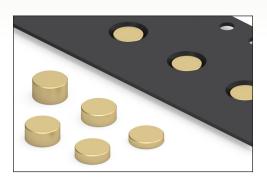
Diameters: $\pm .001$ Angles: $\pm 2^{\circ}$

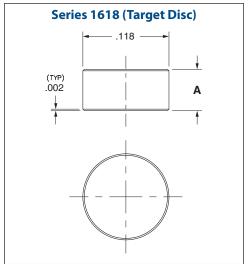


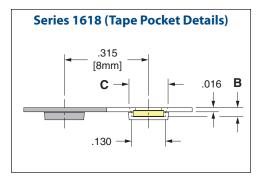


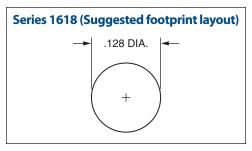
SERIES 1618 • LOW PROFILE TARGET DISCS • SURFACE MOUNT

be used as reliable, durable contact points.





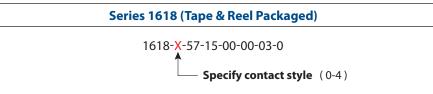




- The 1618-X-57-15-00-00-03-0 Surface mount disc is .118" in diameter and available in five heights from .025" to .065" +/-.002" tall.

 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
- 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



Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	.025	.035	.151	7,200
1	.035	.045	.151	6,000
2	.045	.055	.151	5,125
3	.055	.065	.151	4,000
4	.065	.075	.152	3,850
		XX=Plating Code See Below	/ & Envi	For ical, Mechanical iromental Data, see page 264

SPECIFY PLATING CODE XX=	15 🔷		
Pin Plating	10 μ" Au		

SPECIFICATIONS:

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

Dimensions: Inches

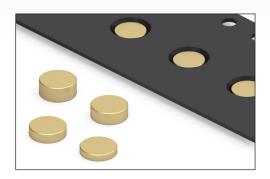
Tolerances On: Lengths: $\pm .002$

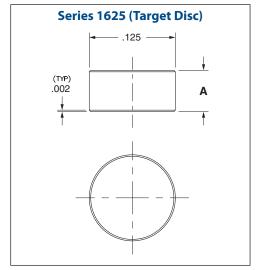
Diameters: ±.001
Angles: ±2°

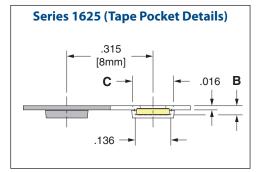


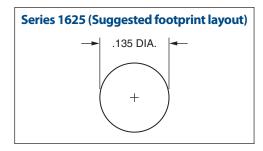


SERIES 1625 • LOW PROFILE TARGET DISCS • SURFACE MOUNT









- The 1625-X-57-15-00-00-03-0 Surface mount disc is .125" in diameter and available in four heights from .025" to .055" +/-.002" 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	.025	.035	.158	7,200
1	.035	.045	.158	6,000
2	.045	.055	.158	5,125
3	.055	.065	.158	4,000
_			.158	

SPECIFICATIONS:

10 μ" Au

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

Dimensions: Inches

Pin Plating

Tolerances On: Lengths: $\pm .002$

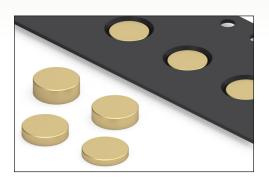
Diameters: $\pm .001$ Angles: $\pm 2^{\circ}$

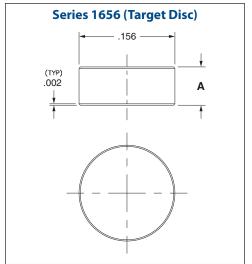


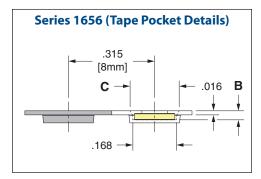


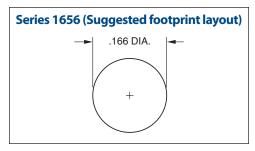
SERIES 1656 • LOW PROFILE TARGET DISCS • SURFACE MOUNT

be used as reliable, durable contact points.





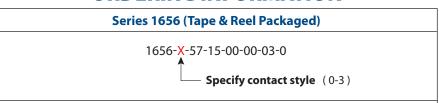




- The 1656-X-57-15-00-00-03-0 Surface mount disc is .156" in diameter and available in four heights from .025" to .055" +/-.002" tall.

 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
- 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



Contact Style	Target Disc Height (A)	Tape Pocket Depth (B)	Tape Pocket Opening (C)	Quantity per Reel
0	.025	.035	.190	7,200
1	.035	.045	.190	6,000
2	.045	.055	.190	5,125
3	.055	.065	.190	4,000
	\	XX=Plating Coo See Below	/ & Env	For ical, Mechanical iromental Data, see page 264
ECIFY PLATING	CODE XX=	15 🔷		

SPECIFICATIONS:

10 μ" Au

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

Dimensions: Inches

Pin Plating

Tolerances On: Lengths: $\pm .002$

Diameters: ± .001
Angles: ± 2°



