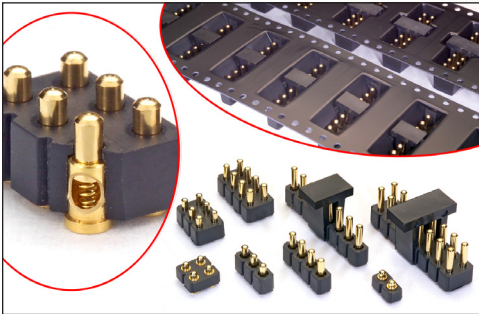


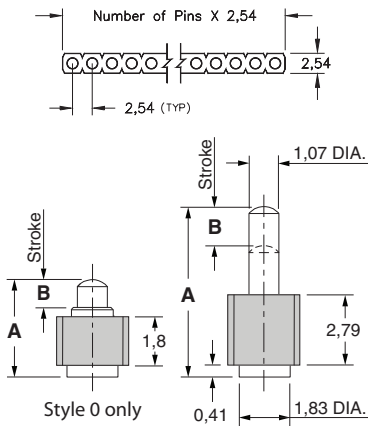
SPRING-LOADED CONNECTORS

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

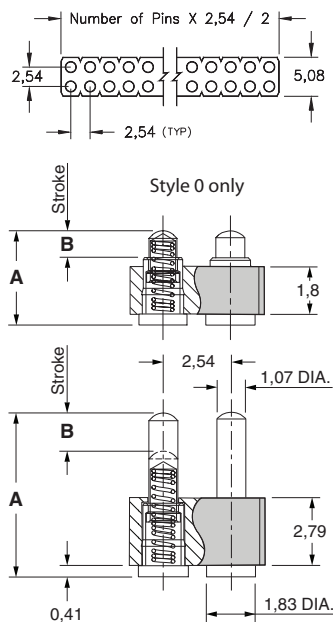


- Modular contacts for use on 2,54 grid, available in five heights from 3,48 to 5,99, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a long stroke relative to the low profile of the 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

SINGLE ROW Series 811



DOUBLE ROW Series 813



ORDERING INFORMATION

Single Row Series 811

811-22-0XX-30-00X101
Specify number of contacts 01-64 **Specify contact style** 0-4

Double Row Series 813

813-22-0XX-30-00X101
Specify number of contacts 04-72 **Specify contact style** 0-4

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

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

Technical Specifications

Materials:

Contact piston & base: Machined copper alloy plated 0,51 μm gold over 2,54 μm nickel
 Spring: Beryllium copper-plated 0,25 μm 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: 1,000,000 cycles
 Coplanarity: 0,13 (Single Row up to 10 pins; Double Row up to 20 pins),
 For higher pin counts, contact Technical Support

Electrical:

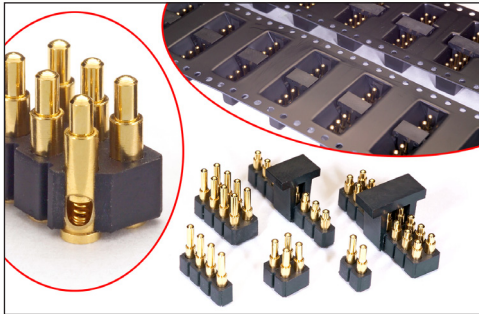
Voltage rating: 100Vrms/150Vdc
 Current rating: 2A (continuous), 3A (peak) per contact
 Contact resistance: 20mΩ max.
 Insulation resistance: 10,000MΩ min.
 Dielectric strength: 700Vrms min.
 Capacitance: 1pF max.

RoHS-2
2011/65/EU



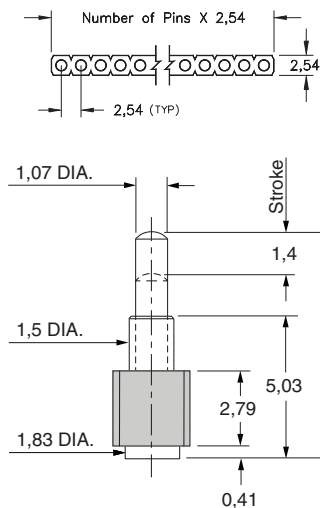
SPRING-LOADED CONNECTORS

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

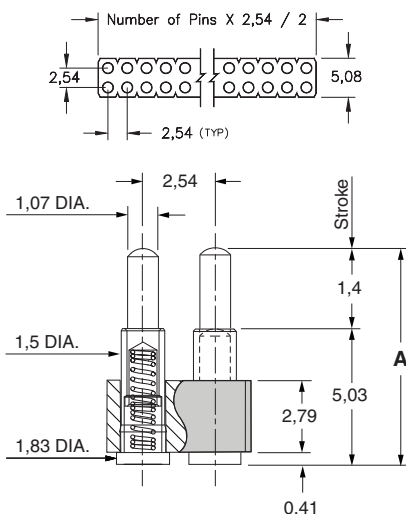


- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Extended body provides greater bearing surface for increased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

SINGLE ROW Series 812



DOUBLE ROW Series 814



ORDERING INFORMATION

Single Row Series 812

812-22-0XX-30-00X101

Specify number of contacts 02-64

Specify contact style 0-9

Double Row Series 814

814-22-0XX-30-00X101

Specify number of contacts 04-72

Specify contact style 0-9

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

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

Technical Specifications

Materials:

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

Mechanical:

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

Electrical:

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

RoHS-2
2011/65/EU



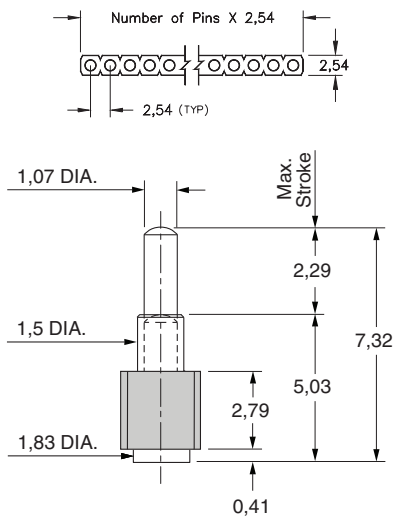
SPRING-LOADED CONNECTORS

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

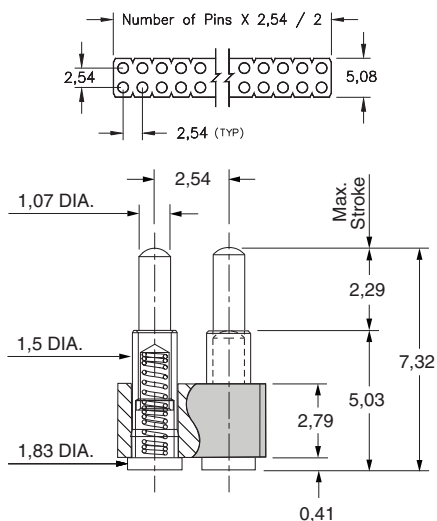


- Modular contacts for use on 2,54 grid, available in a height of 7,32, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a 1,14 mid. stroke and a 2,29 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 819 & 820 series contact strips are designed for placement onto a Ø 2,08 solder pad prior to reflow soldering
- Tape and Reel packaging available, contact Technical Support

SINGLE ROW Series 819



DOUBLE ROW Series 820



ORDERING INFORMATION

Single Row Series 819

819-22-0XX-30-001101

Specify number of contacts 01-64

Double Row Series 820

820-22-0XX-30-001101

Specify number of contacts 04-72

Technical Specifications

Materials:

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

Mechanical:

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

Electrical:

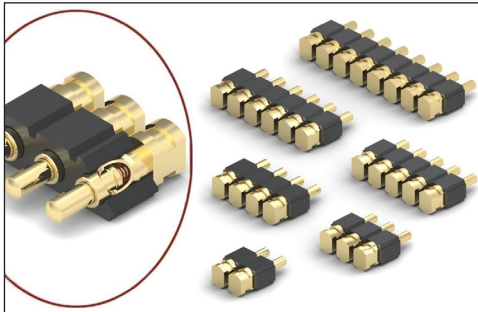
Voltage rating: 100Vrms/150Vdc
 Current rating: 2A (continuous), 3A (peak) per contact
 Contact resistance: 20mΩ max.
 Insulation resistance: 10,000MΩ min.
 Dielectric strength: 700Vrms min.
 Capacitance: 1pF max.

RoHS-2
2011/65/EU



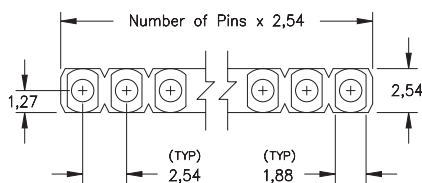
SPRING-LOADED CONNECTORS

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

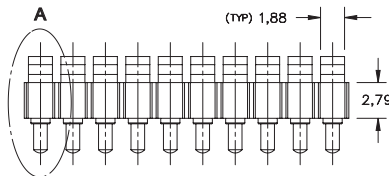


- Modular contacts for use on 2,54 grid, supplied in single row contact strips. Piston action is parallel to the board surface
- Ideal for daisy chaining of P.C.B.'s when mated with right angle target connectors (series 399...10-008) or for mating boards in a perpendicular orientation
- Precision-machined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

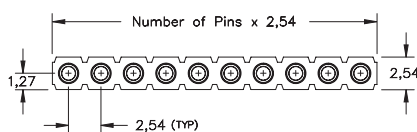
SINGLE ROW Series 810



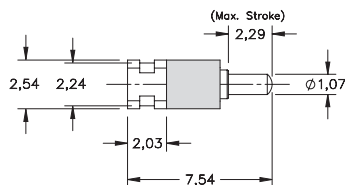
TOP VIEW



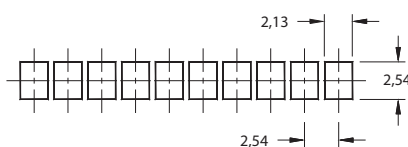
FRONT VIEW



DETAIL 'A'



Suggested P.C.B. FOOTPRINT



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

ORDERING INFORMATION

Single Row Series 810

810-22-0XX-40-001101

Specify number of contacts 01-10

Technical Specifications

Materials:

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

Mechanical:

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

Electrical:

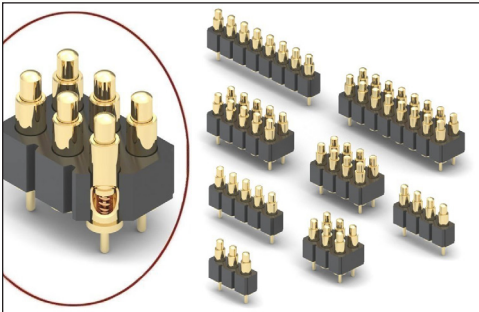
Voltage rating: 100Vrms/150Vdc
 Current rating: 2A (continuous), 3A (peak) per contact
 Contact resistance: 20mΩ max.
 Insulation resistance: 10,000MΩ min.
 Dielectric strength: 700Vrms min.
 Capacitance: 1pF max.

RoHS - 2
2011/65/EU



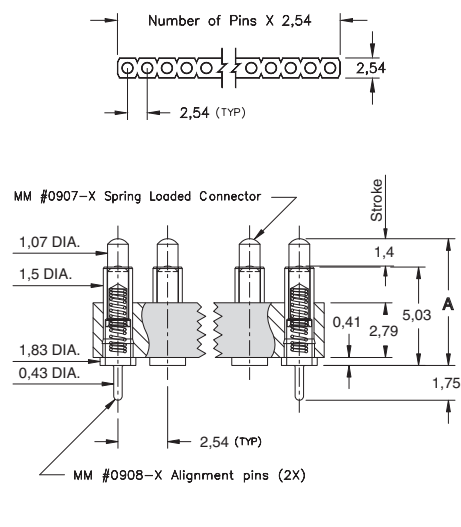
SPRING-LOADED CONNECTORS

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

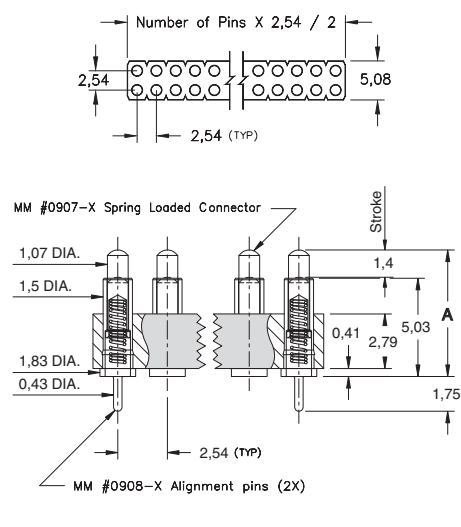


- Modular contacts for use on 2,54 grid, available in ten heights from 6,48 to 10,92, supplied in single and double row contact strips
- Precision-machined piston / base and gold-plated components assure a 1,000,000 cycle life durability
- Pistons have a 0,7 mid stroke & 1,4 max. stroke
- Low resistance, high current contacts are rated at 2 amps continuous, 3 amps peak
- High temperature thermoplastic insulators are suitable for surface mount processes
- Both 812 & 814 series contact strips are designed for manual placement, $\varnothing 0,56 \pm 0,08$ plated through-holes in the circuit board are required for the alignment pins prior to intrusive reflow soldering

SINGLE ROW Series 812



DOUBLE ROW Series 814



ORDERING INFORMATION

Single Row Series 812...01X101

812-22-0XX-30-01X101

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

Double Row Series 814...01X101

814-22-0XX-30-01X101

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

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

Technical Specifications

Materials:

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

Mechanical:

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

Electrical:

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

RoHS-2
2011/65/EU



SPRING-LOADED CONNECTORS

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

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

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