Versatile, robust family of high-density 1.27mm wire-to-board Picoflex® headers and connectors, now with reverse PCB footprint SMT headers, offer space-saving solutions for a greater range of compact power and signal ribbon-cable applications

Picoflex headers and connectors provide highly reliable 1.27mm ribbon-cable connections with high-retention forces in an extremely diverse range of applications including solar, weighing systems, vehicle infotainment, computer peripherals, telecommunications and portable heart-rate monitors. Molex has expanded the Picoflex family to include reverse-footprint SMT headers. Available with and without latches and in optional high-temperature plastic, the new headers provide customers with a wider range of application opportunities without the need for costly PCB re-design.

In addition to Tin (Sn) plated contacts, Molex offers Picoflex connectors and headers plated with Palladium Nickel (PdNi) plus a Gold (Au) flash. Palladium Nickel is a durable, technologically advanced plating material with excellent wear-resistance properties, resistance to corrosion and is non-oxidizing. A flash of Gold over the Palladium provides lubrication and surface wear resistance.

In today’s economic climate, PdNi-plated connectors are being widely adopted as a replacement for pure Gold-plated versions owing to the superior deposit characteristics of PdNi over Gold and lower, more stable raw material costs. For additional information and to view the full range of available Picoflex headers and connectors visit: www.molex.com/product/ribbon/picoflex.html

Features and Benefits

Reverse PCB footprint SMT headers: series 93405 and 93407 compatible with Tyco’s Micro-Match series 188275

Provides second source on existing customer BOMs without the need for PCB re-design
Vendor reduction, price competitiveness and shorter leadtime opportunities

SMT headers with positive retention latches available; series 90816/93407
Increases mated connector retention force by 50% over standard friction-lock series 90814/93405

SMT solder tails available
Header is soldered directly onto PCB pads

High-profile polarising peg
Avoids mis-mating of the header and receptacle
Acts as a lead-in to aid assembly

Available with Tin (Sn) or Palladium Nickel (PdNi) + Gold (Au) flash plated contacts
Cost-effective plating solutions for varied applications

High-temperature housing materials
Compatible with RoHS lead-free reflow soldering processes up to +260°C

Optional PCB pegs to polarise header to PCB
Ensures accurate assembly

Available in tubes or tape and reel
Packaging options to meet customer volume requirements

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**Applications**

**Industrial**
- Solar
- Weighing systems
- Heating systems
- Security devices
- Access controls
- Industrial lighting
- Advertising displays
- Power supplies

**Automotive**
- Car Stereo systems
- Navigation systems
- In car entertainment
- Dashboard applications
- Air-conditioning units

**Medical**
- Portable heart monitor
- Patient monitor
- Blood analysers/testers
- Testers

**Multimedia**
- CD players
- LCD projector
- Satellite receivers
- Televisions and set top boxes

**Consumer**
- Office equipment
- Vending machines
- Smart card reader
- Home appliance

*Used across all markets where signal and power connections are required*

**REFERENCE INFORMATION**

**Packaging:** Tube / tape and reel / bags – check molex.com for details of each series

**Mates With:** 90327 or 93338 (Glow Wire Version)

**Designed In:** Millimetres

**RoHS:** Yes

**Halogen Free:** No

**Glow Wire Compliant:** Yes - Mate with 93338 series

**ELECTRICAL**
- Voltage (max.): 240V
- Current (max.): 1.2A
- Contact Resistance: 15 millohms
- Dielectric Withstanding Voltage: 750V
- Insulation Resistance: 1000V min.

**MECHANICAL**
- Contact Insertion Force: 1.1N per circuit
- Contact Retention to Housing: 7N
- Insertion Force to PCB:
  - Mating Force:
    - Tin = 1.7 N
    - PdNi + Au flash = 1.5N
- Unmating Force: 0.25N per circuit
- Durability (min.):
  - Tin = 30 cycles
  - PdNi + Au flash = 100 cycles
  - 90816 / 93407 = PdNi+Au flash – 5 cycles (using extraction tool) due to latches

**PHYSICAL**
- Housing: Refer to Sales Drawing
- Contact: Refer to Sales Drawing
- Plating:
  - Contact Area —
    - Tin (Sn) or Palladium Nickel (PdNi) with Gold (Au) flash
  - Solder Tail Area — Tin (Sn)
- Underplating — Nickel (Ni)
- Operating Temperature: -40 to +105°C
**Ordering Information**

**93405 Reverse Footprint, Vertical SMT Header**

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<tr>
<th>Order Number</th>
<th>Circuit Size</th>
<th>Plating</th>
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93405-XX

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<tr>
<td>08 16 24</td>
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<td>10 18 26</td>
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X = PCB Pegs

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<th>PCB Pegs</th>
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For additional options refer to molex.com

**93407 Reverse Footprint, Vertical Latched SMT Header**

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## 90814 Vertical SMT Header

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For more information refer to molex.com

## 90816 Vertical Latched SMT Header

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</tbody>
</table>

For more information refer to molex.com
molex®

Ordering Information

For more information refer to molex.com

**90325- X X XX**

- CIRCUIT SIZE

- HOUSING COLOUR:
  - 0 = BLACK
  - 9 = CUSTOMER SPECIFIC
  - 0 = TIN
  - 3 = PDNI
  - 5 = NON-STANDARD VOİDED OPTION
  - 6 = ROUND PEG WITH KINDS OPTION
  - 7 = PDNI TUBED
  - 9 = TIN TUBED

**90779- X X XX**

- CIRCUIT SIZE

- 0 = STANDARD
  - 9 = SHORT VERSION

- 0 = TIN
- 3 = PDNI
- 7 = PDNI TUBED
- 9 = TIN TUBED

For more information refer to molex.com
Ordering Information

For more information refer to molex.com

90327- X 3 XX

04 TO 26 = CIRCUIT SIZE
51 TO 98 = ASSY ON REELS

COLOUR WHITE

0 = TIN
3 = PDNI

90327

Ordering Information

For more information refer to molex.com

93338- X 3 XX

04 TO 26 = CIRCUIT SIZE
51 TO 98 = ASSY ON REELS

COLOUR WHITE

0 = TIN
3 = PDNI

93338

www.molex.com/product/ribbon/picoflex.html