



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, the new headers offer customers a price competitive alternative system without the need for costly board re-design or layout changes.

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

Series 93407 features positive retention latches

Increases mated connector retention force by 50% over standard friction-lock series 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

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

Picoflex® 1.27mm Ribbon Cable, Reverse Footprint SMT Headers

- 93405** Reverse footprint, vertical SMT header
- 93407** Reverse footprint, vertical, SMT latched header
- 90327** Low profile, IDT connector



Picoflex SMT reverse footprint header. Series 93405



Picoflex latched reverse footprint SMT Header. Series 93407



Low profile IDT connector Series 90327

Consumer

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

Used across all markets where signal and power connections are required

Specifications

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 milliohms

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

Picoflex® 1.27mm Ribbon Cable, Reverse Footprint SMT Headers

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

Low Profile, SMT Headers - Reverse Footprint

Number of Circuits	Order No.		Order No.	
	Standard SMT Header, Reverse Footprint		Latched SMT Header, Reverse Footprint	
	Blister Pack	Tube	Blister Pack	Tube
4	93405-0504	93405-0304	93407-0504	93407-0304
6	93405-0506	93405-0306	93407-0506	93407-0306
8	93405-0508	93405-0308	93407-0508	93407-0308
10	93405-0510	93405-0310	93407-0510	93407-0310
12	93405-0512	93405-0312	93407-0512	93407-0312
14	93405-0514	93405-0314	93407-0514	93407-0314
16	93405-0516	93405-0316	93407-0516	93407-0316
18	93405-0518	93405-0318	93407-0518	93407-0318
20	93405-0520	93405-0320	93407-0520	93407-0320

Plating = Tin 2-4µm (80-160µ")

PdNi with gold flash plating available on request

Headers with PCB pegs available on request

Low Profile, IDT Receptacle

Number of Circuits	Order No.	
	Tube	Tape
4	90327-0304	90327 0351
6	90327-0306	90327 0355
8	90327-0308	90327 0359
10	90327-0310	90327 0363
12	90327-0312	90327 0367
14	90327-0314	90327 0371
16	90327-0316	90327 0375
18	90327-0318	90327 0379
20	90327-0320	90327 0383

Plating = Tin 2-4µm (80-160µ")

PdNi with gold flash plating available on request

Glow Wire version available on request

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