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Part Number: [0449140801](#)
Status: **Active**
Overview: [Micro-Fit, 3.0™](#)
Description: 3.00mm (.118") Pitch Micro-Fit 3.0 CPI™ Header, Compliant Pin Interface, Dual Row, Vertical, 8 Circuits, Tin (Sn) Plating, Glow Wire Compatible

Documents:

[3D Model](#) [Product Specification PS-43045 \(PDF\)](#)
[Drawing \(PDF\)](#) [Related Catalog Page \(PDF\)](#)
[Product Literature \(PDF\)](#)

General

Product Family	PCB Headers
Series	44914
Application	Wire-to-Board
Comments	Glow Wire Equivalent Part Number 449140801 . High Temperature, Square Pin
Overview	Micro-Fit, 3.0™
Product Name	Micro-Fit 3.0 CPI™

Physical

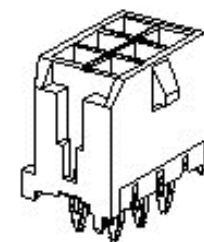
Breakaway	No
Circuits (Loaded)	8
Circuits (maximum)	8
Color - Resin	Black
Durability (mating cycles) min	30 cycles
Flammability	94V-0
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PCB Locator	Yes
PCB Retention	Yes
Packaging Type	Tray
Pitch - Mating Interface (in)	0.118 In
Pitch - Mating Interface (mm)	3.00 mm
Plating min: Mating (µin)	200
Plating min: Mating (µm)	5
Plating min: Termination (µin)	200
Plating min: Termination (µm)	5
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole - Compliant Pin

Electrical

CSA	LR19980
Current - Maximum	5.000 Amp
UL	E29179
Voltage - Maximum	250V

Material Info

Reference - Drawing Numbers



Series image - Reference only

EU RoHS

**ELV and RoHS
Compliant**

China RoHS



**Need more information on product
environmental compliance?**

Email productcompliance@molex.com
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[44914 Series](#)

Mates With

[43025-0800](#)

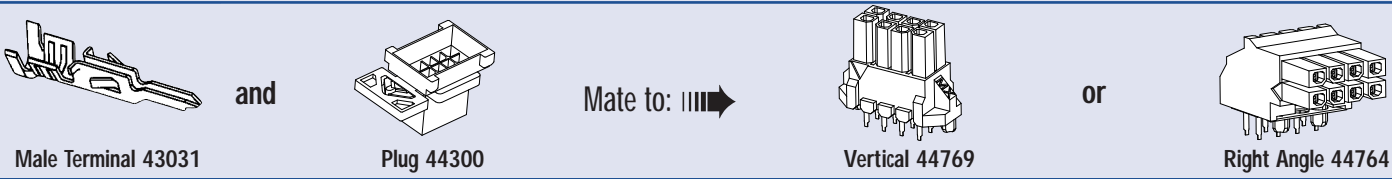
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Wire-to-Wire BMI Connector System



Wire-to-Board BMI Connector System



Board-to-Board BMI Connector System

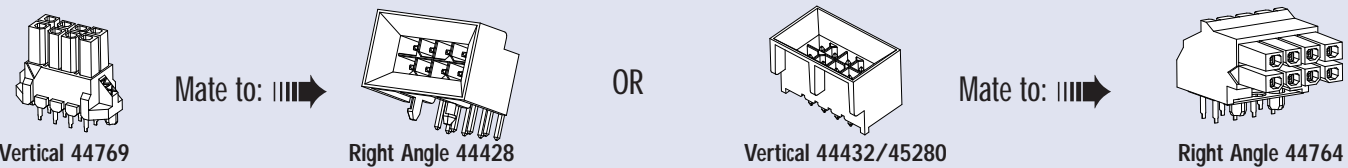
Horizontal Boards



Coplanar Boards

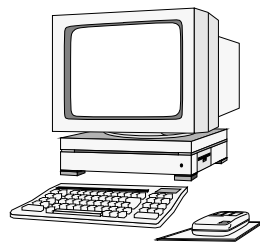


Right Angle Boards



MICRO-FIT 3.0 FAMILY APPLICATION EXAMPLES

- Personal Computers
- Work Stations
- Vending Machines
- Mainframe Computers
- Satellites
- Pin Ball Machines
- Handheld Computers
- Cellular Telephones
- AC Power Line Cords
- Slot Machines
- Notebook PCs
- Coffeemakers
- Exercise Equipment
- Fan Tray Assemblies
- Fax Machines
- Backplane Applications
- Power Supplies



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Visit our Web site at <http://www.molex.com>

- Fully isolated contacts
- Up to 5.0A per circuit
- Full polarization
- 250V AC rating
- Positive locks
- UL 94V-0, CSA, TUV approved

Crimp Terminals

	Description	Order No.		Wire Gauge	Plating
		Reel	Bag		
	Female Terminal	43030-0001	43030-0007	20 - 24	Tin
		43030-0004	43030-0010	26 - 30	
		43030-0002	43030-0008	20 - 24	15µ" Gold
		43030-0005	43030-0011	26 - 30	
		43030-0003	43030-0009	20 - 24	30µ" Gold
		43030-0006	43030-0012	26 - 30	
	Male Terminal	43031-0001	43031-0007	20 - 24	Tin
		43031-0004	43031-0010	26 - 30	
		43031-0002	43031-0008	20 - 24	15µ" Gold
		43031-0005	43031-0011	26 - 30	
		43031-0003	43031-0009	20 - 24	30µ" Gold
		43031-0006	43031-0012	26 - 30	

Crimp Housings

Description		Order No.	Material	Description		Order No.	Material
Receptacles (Use with 43030 terminals)				Plugs (Use with 43031 terminals)			
	Single Row	43645-XX00	Black Polyester		Single Row, Free Hanging	43640-XX01	Black Polyester
					Single Row, Panel Mount	43640-XX00	
	Dual Row	43025-XX00	Black Polyester		Dual Row, Free Hanging	43020-XX01	Black Polyester
					Dual Row, Panel Mount	43020-XX00	

Right Angle Headers

Single Row	Description	Order No.	Plating	Material	Dual Row	Description	Order No.	Plating	Material
	Surface Mount Compatible with Pegs	43650-XX00	Tin	High Temperature, Black LCP		Surface Mount Compatible with Pegs	43045-XX00	Tin	High Temperature, Black LCP
		43650-XX01	15µ" Gold				43045-XX01	15µ" Gold	
		43650-XX02	30µ" Gold				43045-XX02	30µ" Gold	
	SMT with Solderable Retention Clip	43650-XX09	Tin	High Temperature, Black LCP		SMT with Solderable Retention Clip	43045-XX06	Tin	High Temperature, Black LCP
		43650-XX10	15µ" Gold				43045-XX07	15µ" Gold	
		43650-XX11	30µ" Gold				43045-XX08	30µ" Gold	
	SMT with Solder Tabs	43650-XX12	Tin	High Temperature, Black LCP		SMT with Solder Tabs	43045-XX09	Tin	High Temperature, Black LCP
		43650-XX13	15µ" Gold				43045-XX10	15µ" Gold	
		43650-XX14	30µ" Gold				43045-XX11	30µ" Gold	

Vertical Headers

Single Row	Description	Order No.	Plating	Material	Dual Row	Description	Order No.	Plating	Material
	Surface Mount Compatible with Pegs	43650-XX15	Tin	High Temperature, Black LCP		Surface Mount Compatible with Pegs	43045-XX12	Tin	High Temperature, Black LCP
		43650-XX16	15µ" Gold				43045-XX13	15µ" Gold	
		43650-XX17	30µ" Gold				43045-XX14	30µ" Gold	
	SMT with Solderable Retention Clip	43650-XX21	Tin	High Temperature, Black LCP		SMT with Solderable Retention Clip	43045-XX15	Tin	High Temperature, Black LCP
		43650-XX22	15µ" Gold				43045-XX16	15µ" Gold	
		43650-XX23	30µ" Gold				43045-XX17	30µ" Gold	
	SMT with Solder Tabs	43650-XX24	Tin	High Temperature, Black LCP		SMT with Solder Tabs	43045-XX18	Tin	High Temperature, Black LCP
		43650-XX25	15µ" Gold				43045-XX19	15µ" Gold	
		43650-XX26	30µ" Gold				43045-XX20	30µ" Gold	

Replace XX with number of circuits, 02 to 24

MICRO-FIT 3.0

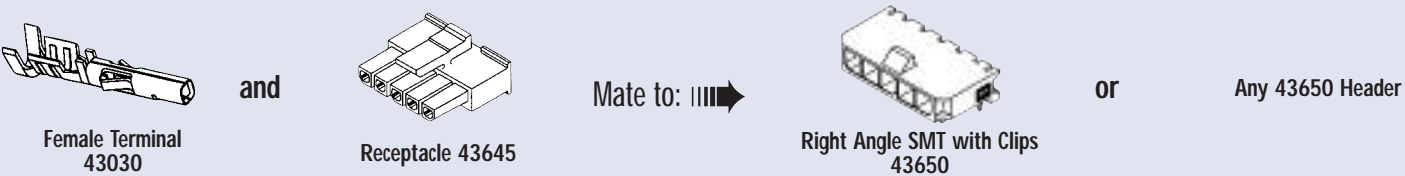
**molex® 3.00mm (.118") Pitch
Micro-Fit 3.0™ Family**

The Micro-Fit 3.0 is a unique connector system that incorporates many of the features previously found only on large power connectors. These connectors are the perfect choice when you need compact connectors that can carry up to 5.0A of current. Micro-Fit 3.0 is available in circuit sizes 2 to 24 for wire-to-board and wire-to-wire applications. With more than 500 part numbers and still growing, this expansive product line offers through hole and SMT options. SMT versions are available in tape and reel packaging for robotic placement on the PCB.

Wire-to-Wire Single Row Connector System



Wire-to-Board Single Row Connector System



Wire-to-Wire Dual Row Connector System



Wire-to-Board Dual Row Connector System



MICRO-FIT 3.0, CPI AND MICRO-FIT 3.0, BMI CPI

The Micro-Fit 3.0, CPI (Compliant Pin Interface) and Micro-Fit 3.0, BMI CPI (Blind Mate Version with Compliant Pin Interface) are vertical header product extensions featuring press-fit PC tails.

- CPI style (Press-Fit) pins require no soldering to the PCB
- 2.36mm (.093") minimum PCB thickness

Standard CPI

	Description	Order No.	Plating	Material
	Standard Vertical CPI	44914-XX01	Tin	High Temperature, Black LCP
		44914-XX02	12µ" Gold	
		44914-XX03	30µ" Gold	

BMI CPI

	Blind Mate Vertical CPI	45280-XX01	Tin	High Temperature, Black Glass-Filled Nylon
		45280-XX02	12µ" Gold	
		45280-XX03	30µ" Gold	

MICRO-FIT 3.0, BMI

**molex® 3.00mm (.118") Pitch
Micro-Fit 3.0™ Family**

Micro-Fit 3.0, BMI™ (Blind Mate Interface) features an innovative panel mounting design that securely locks the plugs and receptacles in place in the panel cutout, while allowing for removal. The plugs and headers feature a funnel entry to guide the mating receptacle or receptacle header into place. Micro-Fit 3.0, BMI housings and headers mate exclusively with the BMI components shown here.

- Full polarization
- Fully isolated contacts
- Dual row
- Sizes 4 to 24 circuits
- Up to 5.0A per circuit
- Up to 1500V AC dielectric withstand voltage
- UL 94V-0, CSA, TUV approved

Crimp Housings

- Use standard Micro-Fit terminals
- Receptacle floats in panel cutout up to 1.27mm (.050") in any direction
- Can be utilized with BMI board-to-board connectors
- Panel thickness: 1.57mm (.062")

	Description	Order No.	Material
	Panel Mount Receptacle	44133-XX00	Black, Polyester
	Panel Mount Plug	44300-XX00	Black, Polyester

Headers

- Can be utilized with BMI wire-to-wire connectors
- 1.57mm (.062") PCB thickness
- Surface mount compatible (SMC)
- Black, glass filled nylon housings

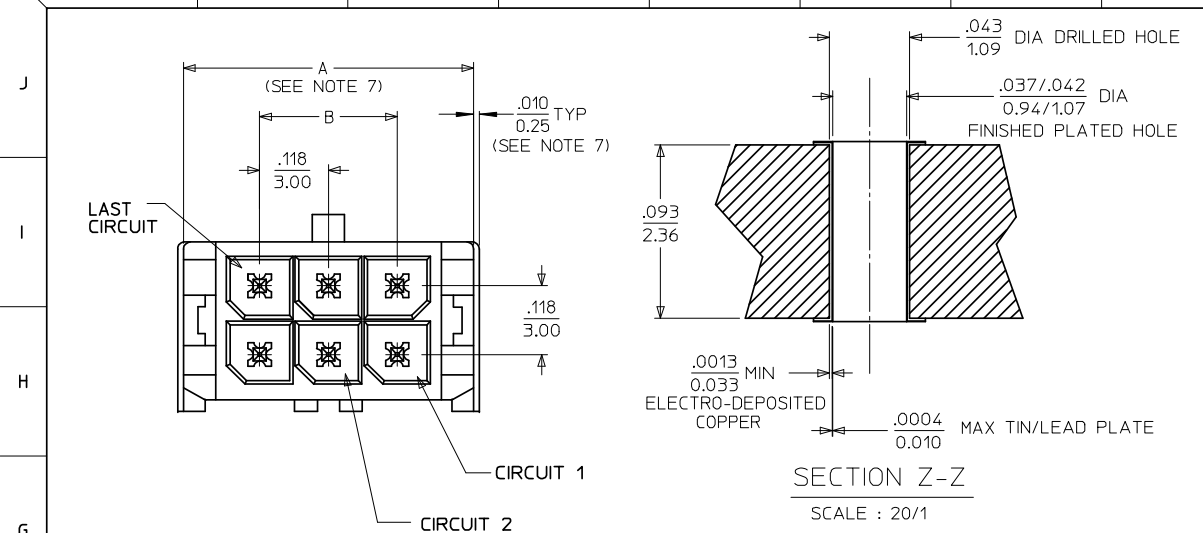
Right Angle

	Description	Order No.	Plating		Description	Order No.	Plating
	Right Angle Header with Pegs	44428-XX01	Tin		Right Angle Receptacle	44764-XX01	Tin
		44428-XX02	15µ" Gold			44764-XX02	15µ" Gold
		44428-XX03	30µ" Gold			44764-XX03	30µ" Gold

Vertical

	Vertical Header with Pegs	44432-XX01	Tin		Vertical Receptacle	44769-XX01	Tin
		44432-XX02	15µ" Gold			44769-XX02	15µ" Gold
		44432-XX03	30µ" Gold			44769-XX03	30µ" Gold

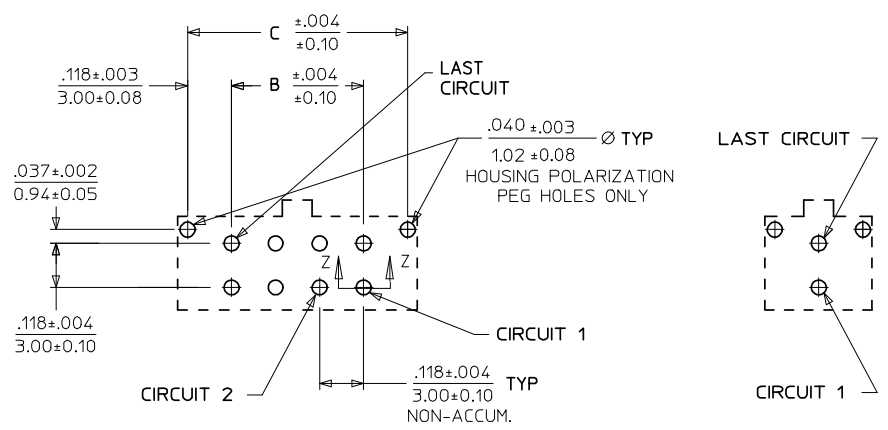
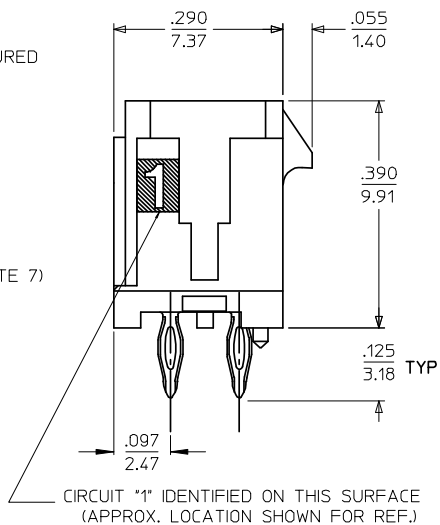
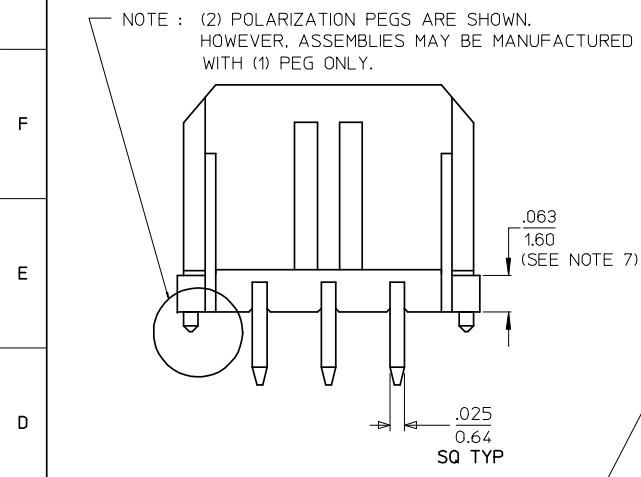
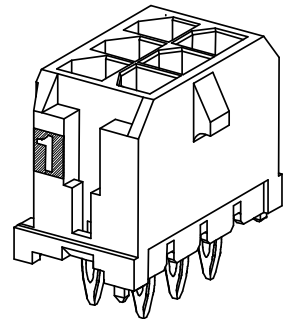
Replace XX with number of circuits, 04 to 24



	FINISH: A	FINISH: B	FINISH: C
CKTS	MATERIAL NO:	MATERIAL NO:	MATERIAL NO:
02	44914-0201	44914-0202	44914-0203
04	44914-0401	44914-0402	44914-0403
06	44914-0601	44914-0602	44914-0603
08	44914-0801	44914-0802	44914-0803
10	44914-1001	44914-1002	44914-1003
12	44914-1201	44914-1202	44914-1203
14	44914-1401	44914-1402	44914-1403
16	44914-1601	44914-1602	44914-1603
18	44914-1801	44914-1802	44914-1803
20	44914-2001	44914-2002	44914-2003
22	44914-2201	44914-2202	44914-2203
24	44914-2401	44914-2402	44914-2403

CKTS	A (SEE NOTE 7)	B	C
02	.262 6.65	NA	.236 6.00
04	.380 9.65	.118 3.00	.354 9.00
06	.498 12.65	.236 6.00	.472 12.00
08	.616 15.65	.354 9.00	.591 15.00
10	.734 18.65	.472 12.00	.709 18.00
12	.852 21.65	.591 15.00	.827 21.00
14	.970 24.65	.709 18.00	.945 24.00
16	1.088 27.65	.827 21.00	1.063 27.00
18	1.206 30.65	.945 24.00	1.181 30.00
20	1.325 33.65	1.063 27.00	1.299 33.00
22	1.443 36.65	1.181 30.00	1.417 36.00
24	1.561 39.65	1.299 33.00	1.535 39.00

SECTION Z-Z
SCALE : 20/1



NOTES:

- HOUSING MATERIAL: GLASS FILLED LIQUID CRYSTAL POLYMER, UL94V-0, COLOR: BLACK
TERMINAL MATERIAL: MODIFIED TIN/BRASS ALLOY
- FINISH: A = .000200/(0.0051) MIN. TIN OVER .000050/(0.0013) MIN. NICKEL PLATE.
B = .000015/(0.00038) MINIMUM GOLD IN SELECTIVE AREA,
.000060/(0.00152) MINIMUM TIN/LEAD (90/10) ON PCB TAILS,
BOTH OVER .000050/(0.00127) MINIMUM NICKEL PLATE.
C = .000030/(0.00076) MINIMUM GOLD IN SELECTIVE AREA,
.000060/(0.00152) MINIMUM TIN/LEAD (90/10) ON PCB TAILS,
BOTH OVER .000050/(0.00127) MINIMUM NICKEL PLATE.
- PRODUCT SPECIFICATION: PS-43045
- TRAY PACKAGED: SEE MOLEX DRAWING PK-70873-0314
- MATES WITH MICRO FIT (3.0) RECEPTACLE SERIES 43025
- HEADER INSTALLATION REQUIRES A MINIMUM FORCE OF 24LBS/(107 N) PER CIRCUIT DISTRIBUTED EQUALLY ACROSS THE ENTIRE HOUSING SURFACE.
- .010/0.25 OFFSETS ARE PRESENT ON ALL PARTS MANUFACTURED AFTER 11/1/2007, AND ON PARTS PRIOR TO 11/1/2007 THAT CONTAIN A GREEN DOT ON THE PRIMARY SHIPPING CARTON LABEL.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

PCB LAYOUT: COMPONENT SIDE
RECOMMEND PCB THICKNESS: .093/2.36

PCB LAYOUT: 2 CKT HEADER

ADD .097 DIM. NOTE 8 EC NO: UCP2008-0324 DRWN:MKI/PPER 2007/12/19 CHKD:SSOUSEK 2007/12/20 APPR:FSMLTH 2007/12/21	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±--- ±--- 3 PLACES ±--- ±.010 2 PLACES ±.025 ±.014 1 PLACE ±0.36 ±--- ANGULAR ±1/2°	DIMENSION STYLE IN/MM DRAWN BY DATE BURLERSON 2001/08/30 CHECKED BY DATE MUELLER 2001/08/30 APPROVED BY DATE MARGULIS 2001/08/30	SCALE --- DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE MICRO FIT HEADER VERTICAL COMPLIANT PIN TRAY PACKED	
	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-44914-001	SHEET NO. 1 OF 1	moxlex MOLEX INCORPORATED		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				