

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0874271802](#)  
**Status:** **Active**  
**Overview:** [minifit\\_jr](#)  
**Description:** 4.20mm (.165") Mini-Fit Jr.™ Header, Right Angle, Nylon, without Flange, 18 Circuits, Tin (Sn) over Nickel (Ni) Plating, Glow Wire Compatible

**Documents:**

[3D Model](#) [Product Specification PS-87427-0001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

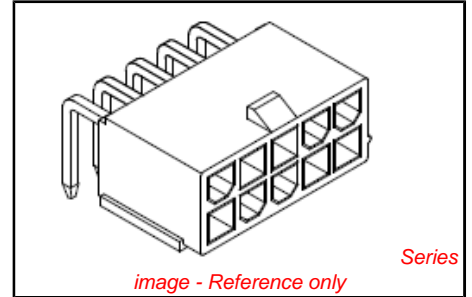
**General**

Product Family PCB Headers  
 Series [87427](#)  
 Application Wire-to-Board  
 Comments Current = 13A max. per circuit when header is mated to a receptacle loaded with [45750](#) Mini-Fit Plus HCS™ Crimp Terminal Crimped to to 16 AWG wire. . See Molex product specification PS-45750-001 for additional current de-rating information.

Overview [minifit\\_jr](#)  
 Product Name Mini-Fit Jr.™

**Physical**

Breakaway No  
 Circuits (Loaded) 18  
 Color - Resin Beige  
 Durability (mating cycles max) 30  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant Yes  
 Lock to Mating Part Yes  
 Material - Metal Brass  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 2  
 Orientation Right Angle  
 PC Tail Length (in) 0.130 In  
 PC Tail Length (mm) 3.30 mm  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.165 In  
 Pitch - Mating Interface (mm) 4.20 mm  
 Pitch - Term. Interface (in) 0.165 In  
 Pitch - Term. Interface (mm) 4.20 mm  
 Plating min: Mating (µin) 101.6  
 Plating min: Mating (µm) 2.54  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54



<p><b>EU RoHS</b>  <b>ELV and RoHS</b>  <b>Compliant</b>  <b>REACH SVHC</b>  <b>Contains SVHC: No</b>  <b>Halogen-Free</b>  <b>Status</b>  <b>Not Halogen-Free</b></p>	<p><b>China RoHS</b></p>
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**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[87427Series](#)

**Mates With**  
[5557 Mini-Fit Jr.™ Receptacle Housing](#)

Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

#### **Electrical**

Current - Maximum per Contact	13A
Voltage - Maximum	600V

#### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	30
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	2
Process Temperature max. C	240

#### **Material Info**

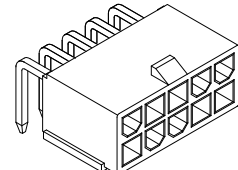
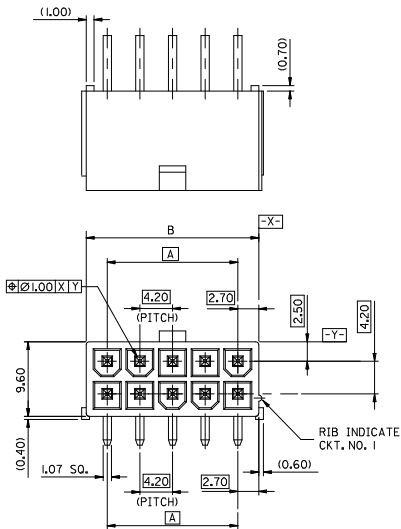
#### **Reference - Drawing Numbers**

Packaging Specification	PK-87427-001
Product Specification	PS-87427-0001
Sales Drawing	SD-87427-**0*

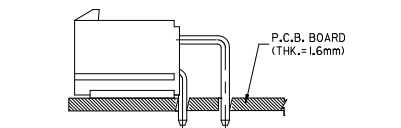
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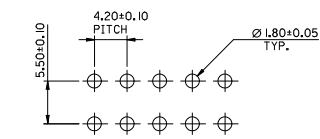
10 9 8 7 6 5 4 3 2 1



**ISOMETRIC VIEW**



**RECOMMENDED INSTALLATION PATTERN**



**RECOMMENDED P.C.B. LAYOUT**

- LEGEND**  
87427-\*\*\*\*
- CKT. SIZE (SEE SHEET 2).
  - PLATING OPTIONS
    - 2 = NOTE 2
    - 3 = NOTE 3
  - PACKAGING OPTIONS
    - 0 = TRAY PACKED
    - 2 = TUBE PACKED

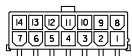
**NOTES**

1. MATERIAL - HEADER : NYLON 46, UL94V-0, COLOR BEIGE  
PIN : BRASS (1.07 SQUARE)
2. PLATING OF PIN  
TIN 2.54µm MIN. OVER NICKEL 1.27µm MIN.
3. PLATING OF PIN  
TIN 4-10µm OVER COPPER 2-8µm.
4. PLATING OF PIN  
TIN 2.54µm MIN. OVER NICKEL 1.27µm MIN. WITH MATT FINISH.
5. PART NUMBERS 36633-0020 TO 36633-0024 & 36633-0040 TO 36633-0046 INCLUDED AS SHOWN IN TABLE 'X'.

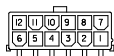
CORRECT TOLERANCE EC NO: UCP2010-0395 DRAWN: JJAGUILAR 2010/04/09 CHKD: EDMUD 1995/03/01 APPR: FSMITH 2010/04/09	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH	DRAWN BY STEVEN	DATE 1995/02/27	TITLE 4.2MM W-T-B HIGH TEMP. RIGHT ANGLE HEADER WITHOUT MOUNTING FLANGES		
REV	DESCRIPTION	4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± 0.20 ± ---	APPROVED BY FSMITH	DATE 2010/04/09	molex MOLEX INCORPORATED
		ANGULAR ± --- °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-87427-***0*	
		SIZE A 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

9 8 7 6 5 4 3 2 1

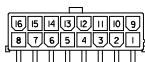
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CKT.SIZE 14



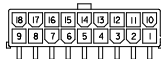
CKT.SIZE 12



CKT.SIZE 16



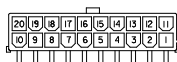
CKT.SIZE 10



CKT.SIZE 18



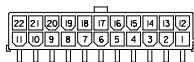
CKT.SIZE 8



CKT.SIZE 20



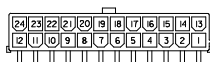
CKT.SIZE 6



CKT.SIZE 22



CKT.SIZE 4



CKT.SIZE 24



CKT.SIZE 2

SEE NOTES $\Delta$ ON SHEET 1 FOR PLATING DETAILS	51.60	46.20	36633-0046	24
	47.40	42.00	36633-0045	22
	43.20	37.80	36633-0024	20
	39.00	33.60	36633-0044	18
	34.80	29.40	36633-0023	16
	30.60	25.20	36633-0043	14
	26.40	21.00	36633-0022	12
	22.20	16.80	36633-0021	10
	18.00	12.60	36633-0042	8
	13.80	8.40	36633-0041	6
	9.60	4.20	36633-0020	4
	5.40	--	36633-0040	2
PIN (OUTSIDE & INSIDE)	B	A	ENG. NO.	CKT. SIZE

TABLE 'X'

51.60	46.20	87427-242*	24
B	A	ENG. NO.	CKT. SIZE
51.60	46.20	87427-240*	24
47.40	42.00	87427-220*	22
43.20	37.80	87427-200*	20
39.00	33.60	87427-180*	18
34.80	29.40	87427-160*	16
30.60	25.20	87427-140*	14
26.40	21.00	87427-120*	12
22.20	16.80	87427-100*	10
18.00	12.60	87427-080*	8
13.80	8.40	87427-060*	6
9.60	4.20	87427-040*	4
5.40	--	87427-020*	2
B	A	ENG. NO.	CKT. SIZE
		TRAY PACKED	

EC NO: I2009-0573 2009/11/11 DRWN:HM01 2009/11/12 CHKD:KPRASAD 2009/11/13 APPR:KPRASAD 2009/11/13 DESCRIPTION REV	QUALITY SYMBOLS $\blacktriangledown=0$ $\nabla=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES $\pm$ --- $\pm$ --- 3 PLACES $\pm$ --- $\pm$ --- 2 PLACES $\pm 0.20$ $\pm$ --- 1 PLACE $\pm 0.20$ $\pm$ --- ANGULAR $\pm$ ---°	DIMENSION STYLE MM ONLY DRAWN BY DATE SAMC 1996/02/05 CHECKED BY DATE	SCALE 1:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE CHART APPROVED BY DATE	TITLE 4.2MM W-T-B,HIGH TEMP. RIGHT ANGLE HEADER WITHOUT MOUNTING FLANGES MOLEX MOLEX INCORPORATED	DOCUMENT NO. SD-87427-**-0* SHEET NO. 2 OF 2
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