

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

**Part Number:** [0366330027](#)  
**Status:** **Active**  
**Overview:** [minifit\\_jr](#)  
**Description:** 4.20mm (.165") Mini-Fit Jr.™ Header, Vertical, Nylon, without Flange, 20Circuits, Tin (Sn) over Nickel (Ni) Plating, Lead free

**Documents:**

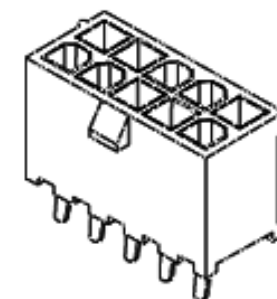
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-87427-0001 \(PDF\)](#)

**General**

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

**Physical**

Breakaway	No
Circuits (Loaded)	20
Color - Resin	Beige
Durability (mating cycles max)	30
First Mate / Last Break	No
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Vertical
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	Bag
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)	100
Plating min: Mating (µm)	2.54
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-40°C to +105°C



*image - Reference only*

*Series*

**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Not Reviewed**  
**Halogen-Free Status Not Reviewed**

**China RoHS**



**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

Termination Interface: Style

Through Hole

**Electrical**

Current - Maximum per Contact

13A

Voltage - Maximum

600V

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification

PK-87427-004

Product Specification

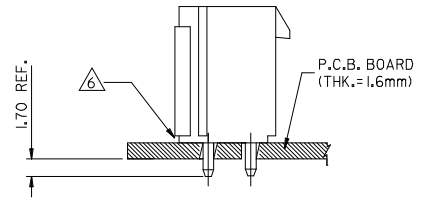
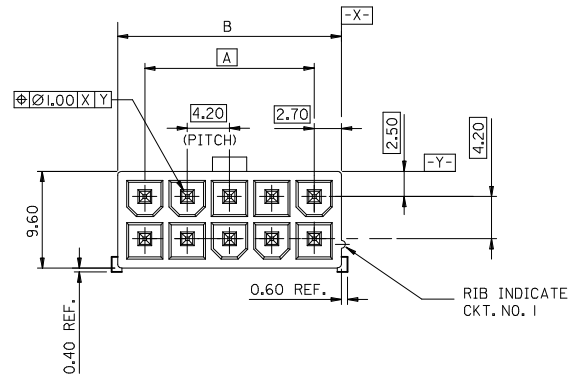
PS-87427-0001

Sales Drawing

SD-87427-\*\*4\*

This document was generated on 05/24/2010

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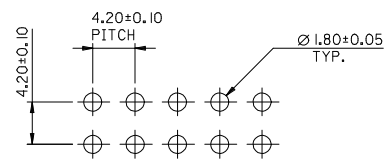
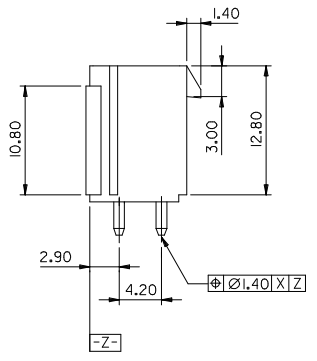
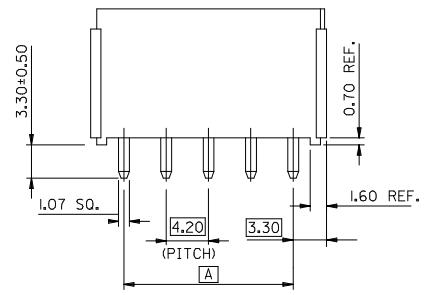
**RECOMMENDED INSTALLATION PATTERN**

**LEGEND**

87427-\*\*\*4\*  
 CKT. SIZE ——— PLATING OPTIONS  
 2 = NOTE   
 3 = NOTE   
 8 = NOTE

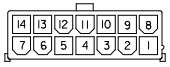
**NOTES**

- MATERIAL - HOUSING : NYLON 46, UL94V-0, COLOR BEIGE  
 PIN : BRASS (1.07 SQUARE)
- PLATING OF PIN  
 TIN 2.54um MIN. OVER NICKEL 1.27um MIN.
- PLATING OF PIN  
 TIN 4-10um OVER COPPER 2-8um.
- PLATING OF PIN  
 GOLD 0.76um MIN. OVER NICKEL 1.27um MIN.
- PLATING OF PIN  
 TIN 2.54um MIN. OVER NICKEL 1.27um MIN. WITH MATT FINISH
- HOUSING STANDOFF (0.70 mm REF.)
- PART NUMBERS 36633-0025 TO 36633-0029 & 36633-0033 TO 36633-0039 INCLUDED AS SHOWN IN TABLE 'X'.

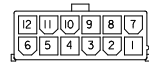


**RECOMMENDED P.C.B.LAYOUT**

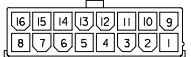
<b>ENTER DESCRIPTION</b> EC NO: I2009-0573 DRWN:HR01 2009/11/11 CHKD:KPRASAD 2009/11/12 APPR:KPRASAD 2009/11/13 REV D	QUALITY SYMBOLS = 0 = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>2:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
		mm      INCH	DRAWN BY SAM.C	DATE 960401	TITLE <b>4.2MM W-T-B HIGH TEMP VERT. HEADER W/O FLANGES</b>			
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± ---°	CHECKED BY DATE	APPROVED BY DATE	MATERIAL NO. <b>SEE SHEET 2</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE <b>A3</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
				MOLEX INCORPORATED	DOCUMENT NO. <b>SD-87427-***4*</b>	SHEET NO. <b>1 OF 2</b>		



CKT.SIZE 14



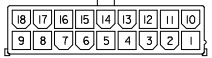
CKT.SIZE 12



CKT.SIZE 16



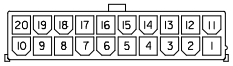
CKT.SIZE 10



CKT.SIZE 18



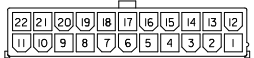
CKT.SIZE 8



CKT.SIZE 20



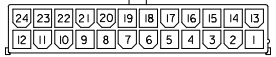
CKT.SIZE 6



CKT.SIZE 22



CKT.SIZE 4



CKT.SIZE 24



CKT.SIZE 2

SEE NOTE  $\Delta$  ON SHEET 1 FOR PLATING DETAILS

51.60±0.55	46.20	36633-0029	24	
47.40±0.55	42.00	36633-0028	22	
43.20±0.50	37.80	36633-0027	20	
39.00±0.45	33.60	36633-0039	18	
34.80±0.35	29.40	36633-0026	16	
30.60±0.30	25.20	36633-0038	14	
26.40±0.30	21.00	36633-0037	12	
22.20±0.30	16.80	36633-0025	10	
18.00±0.30	12.60	36633-0036	8	
13.80±0.25	8.40	36633-0035	6	
9.60±0.25	4.20	36633-0034	4	
5.40±0.20	--	36633-0033	2	
PIN	B	A	ENG. NO.	CKT. SIZE

TABLE 'X'

51.60±0.55	46.20	87427-244*	24
47.40±0.55	42.00	87427-224*	22
43.20±0.50	37.80	87427-204*	20
39.00±0.45	33.60	87427-184*	18
34.80±0.35	29.40	87427-164*	16
30.60±0.30	25.20	87427-144*	14
26.40±0.30	21.00	87427-124*	12
22.20±0.30	16.80	87427-104*	10
18.00±0.30	12.60	87427-084*	8
13.80±0.25	8.40	87427-064*	6
9.60±0.25	4.20	87427-044*	4
5.40±0.20	--	87427-024*	2
B	A	ENG. NO.	CKT. SIZE

<b>ENTER DESCRIPTION</b> EC NO: I2009-0573 DRWN:HR01 2009/11/11 CHKD:KPRASAD 2009/11/12 APPR:KPRASAD 2009/11/13	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± --- ANGULAR ± ---°	mm INCH ± --- ± --- ± 0.20 ± --- ± --- ± ---	DRAWN BY SAM.C	DATE 960415	TITLE <b>4.2MM W-T-B HIGH TEMP VERT. HEADER W/O FLANGES</b>			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY	DATE	MOLEX INCORPORATED			
				MATERIAL NO. <b>SEE CHART</b>	DOCUMENT NO. <b>SD-87427-***4*</b>	SHEET NO. <b>2 OF 2</b>			

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