

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0874271412](#)
Status: **Active**
Overview: [minifit_jr](#)
Description: 4.20mm (.165") Mini-Fit Jr.™ Header, Right Angle, Nylon, with Flange, 14Circuits, 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

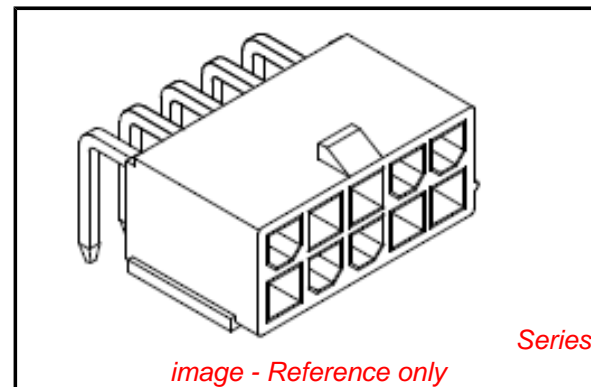
General

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) 14
 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



EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
Halogen-Free Status

China RoHS



Not Halogen-Free

Need more information on product environmental compliance?

Email 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

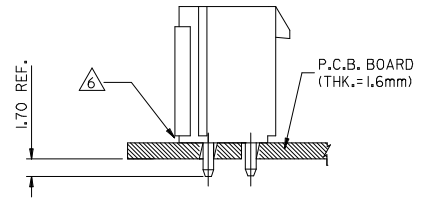
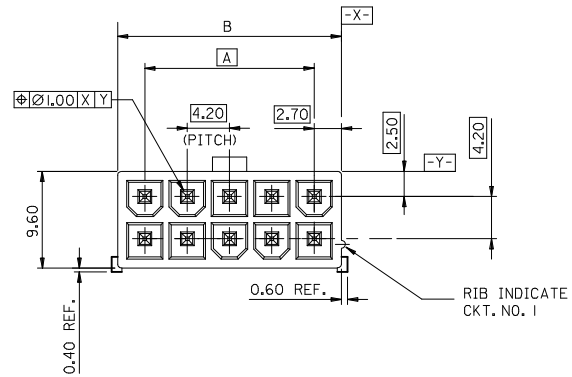
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-87427-003
Product Specification	PS-87427-0001
Sales Drawing	SD-87427-***1*

This document was generated on 05/31/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



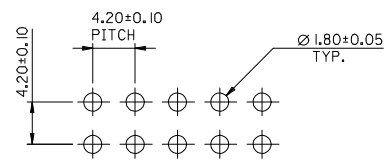
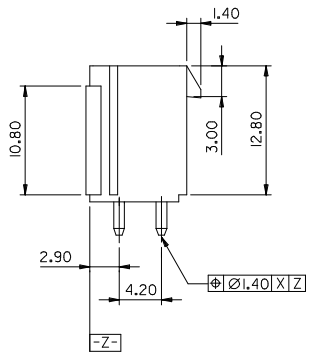
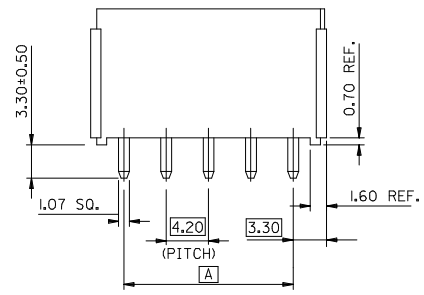
RECOMMENDED INSTALLATION PATTERN

LEGEND

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

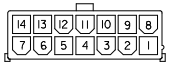
NOTES

1. 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.)
7. PART NUMBERS 36633-0025 TO 36633-0029 & 36633-0033 TO 36633-0039 INCLUDED AS SHOWN IN TABLE 'X'.

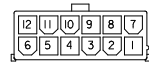


RECOMMENDED P.C.B.LAYOUT

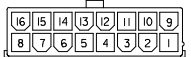
ENTER DESCRIPTION EC NO: I2009-0573 DRWN:HR01 2009/11/11 CHKD:KPRASAD 2009/11/12 APPR:KPRASAD 2009/11/13	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY SAM.C	DATE 960401	TITLE 4.2MM W-T-B HIGH TEMP VERT. HEADER W/O FLANGES		
			± ---	± ---	CHECKED BY	DATE	APPROVED BY		
			± 0.20	± ---	APPROVED BY		DATE	MATERIAL NO. SEE SHEET 2	
		± ---	± ---	APPROVED BY		DATE	DOCUMENT NO. SD-87427-***4*		
		ANGULAR ± ---°		MATERIAL NO. SEE SHEET 2		DOCUMENT NO. SD-87427-***4*		SHEET NO. 1 OF 2	
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							



CKT.SIZE 14



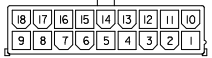
CKT.SIZE 12



CKT.SIZE 16



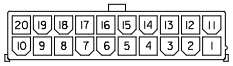
CKT.SIZE 10



CKT.SIZE 18



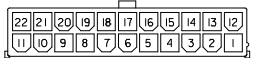
CKT.SIZE 8



CKT.SIZE 20



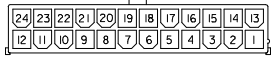
CKT.SIZE 6



CKT.SIZE 22



CKT.SIZE 4



CKT.SIZE 24



CKT.SIZE 2

SEE NOTE $\Delta/5$ 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

ENTER DESCRIPTION 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 MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY SAM.C	DATE 960415	TITLE 4.2MM W-T-B HIGH TEMP VERT. HEADER W/O FLANGES			
		3 PLACES ± --- ± ---		CHECKED BY DATE		APPROVED BY DATE			
		2 PLACES ± 0.20 ± ---		APPROVED BY DATE		MATERIAL NO. SEE CHART			
		1 PLACE ± --- ± ---		APPROVED BY DATE		DOCUMENT NO. SD-87427-***4*		SHEET NO. 2 OF 2	
		ANGULAR ± ---°		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			