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Part Number: [0874271442](#)
Status: **Active**
Overview: [minifit_jr](#)
Description: 4.20mm (.165") Mini-Fit Jr.™ Header, Vertical, Nylon, without 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

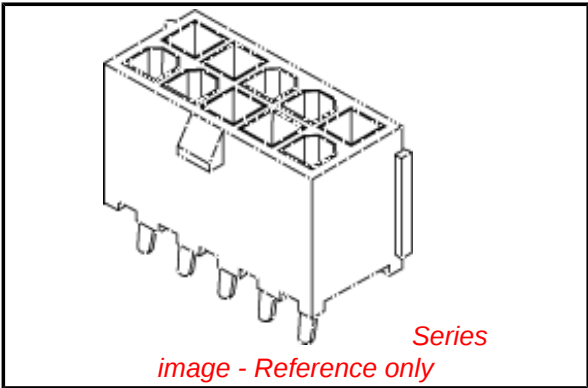
General

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 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 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
Not Halogen-Free

China RoHS



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

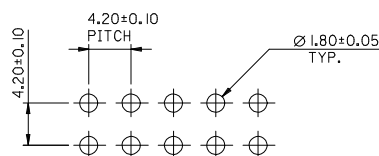
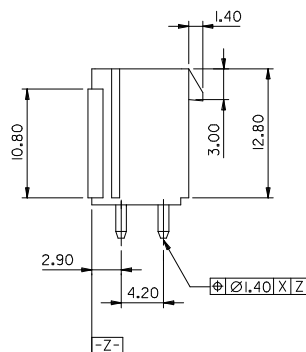
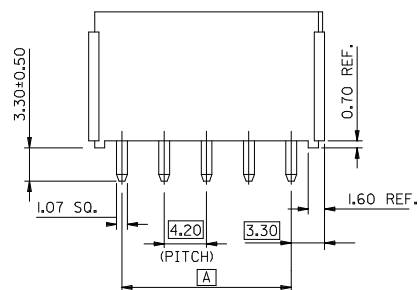
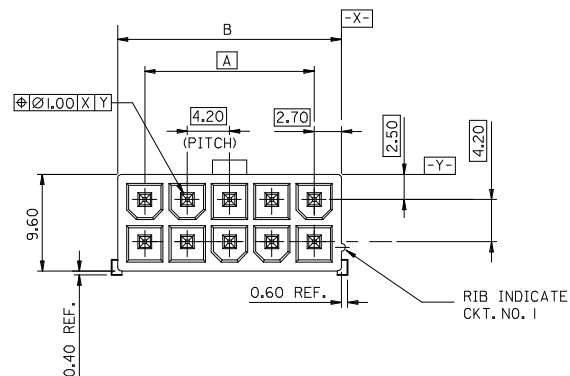
Material Info

Reference - Drawing Numbers

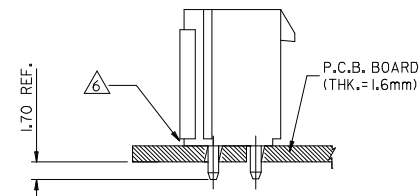
Packaging Specification	PK-87427-004
Product Specification	PS-87427-0001
Sales Drawing	SD-87427-**4*

This document was generated on 05/31/2010

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RECOMMENDED P.C.B.LAYOUT



RECOMMENDED INSTALLATION PATTERN

LEGEND

87427-***4*
CKT. SIZE

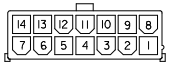
PLATING OPTIONS
2 = NOTE 2
3 = NOTE 3
8 = NOTE 4

NOTES

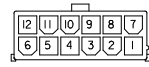
- MATERIAL - HOUSING : NYLON 46, UL94V-0, COLOR BEIGE
PIN : BRASS (1.07 SQUARE)
- PLATING OF PIN
TIN 2.54um MIN. OVER NICKEL 1.27um MIN.
- PLATING OF PIN
TIN 4-10um OVER COPPER 2-8um.
- PLATING OF PIN
GOLD 0.76um MIN. OVER NICKEL 1.27um MIN.
- PLATING OF PIN
TIN 2.54um MIN. OVER NICKEL 1.27um MIN. WITH 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'.

ENTER DESCRIPTION EC NO: I2009-0573 DRWN:HR01 2009/11/11 CHKD:KPRASAD 2009/11/12 APPR:KPRASAD 2009/11/13			DESCRIPTION	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				
D	REV	4 PLACES	± ---	± ---	CHECKED BY		DATE		APPROVED BY					
		3 PLACES	± ---	± ---										
		2 PLACES	± 0.20	± ---										
		1 PLACE	± ---	± ---										
		ANGULAR ± ---°												
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					MATERIAL NO.		DOCUMENT NO.		SHEET NO.					
					SEE SHEET 2		SD-87427-***4*		1 OF 2					
					SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

F

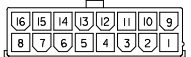


CKT.SIZE 14



CKT.SIZE 12

E

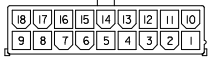


CKT.SIZE 16



CKT.SIZE 10

D

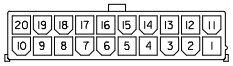


CKT.SIZE 18



CKT.SIZE 8

C

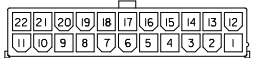


CKT.SIZE 20



CKT.SIZE 6

B

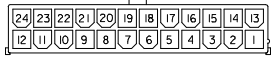


CKT.SIZE 22



CKT.SIZE 4

A



CKT.SIZE 24



CKT.SIZE 2

SEE NOTE  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.
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:HMR01 2009/11/11
CHKD:KPRASAD 2009/11/12
APPR:KPRASAD 2009/11/13

DESCRIPTION
REV

QUALITY SYMBOLS
▽=0
▽C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)
mm INCH
4 PLACES ± --- ± ---
3 PLACES ± --- ± ---
2 PLACES ± 0.20 ± ---
1 PLACE ± --- ± ---
ANGULAR ± ---°
DRAFT WHERE APPLICABLE
MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY
DRAWN BY DATE
SAM.C 960415
CHECKED BY DATE
APPROVED BY DATE
MATERIAL NO.
SIZE A3

SCALE

DESIGN UNITS
METRIC
THIRD ANGLE PROJECTION
TITLE
4.2MM W-T-B HIGH TEMP
VERT. HEADER W/O FLANGES
MOLEX INCORPORATED
DOCUMENT NO.
SD-87427-***4*
SHEET NO.
2 OF 2

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