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Part Number: [0874272043](#)
Status: **Active**
Overview: [minifit_jr](#)
Description: 4.20mm (.165") Mini-Fit Jr.™ Header, Vertical, Nylon, without Flange, 20Circuits, Tin (Sn) over Copper (Cu) 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

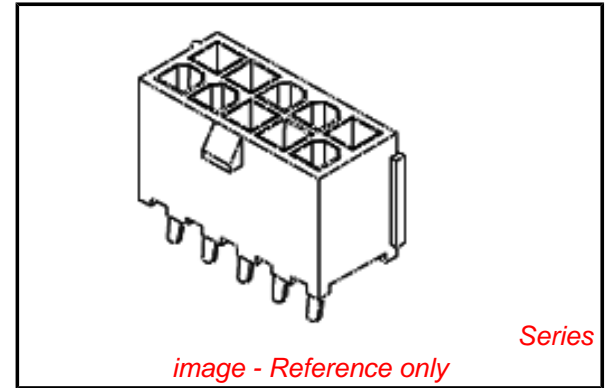
General

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) 20
 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) 203.2
 Plating min: Mating (µm) 5.08
 Plating min: Termination (µin) 203.2
 Plating min: Termination (µm) 5.08



EU RoHS

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

China RoHS



Not Reviewed

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

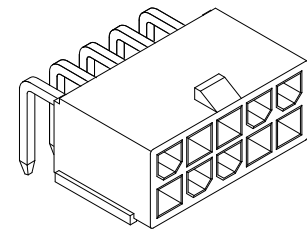
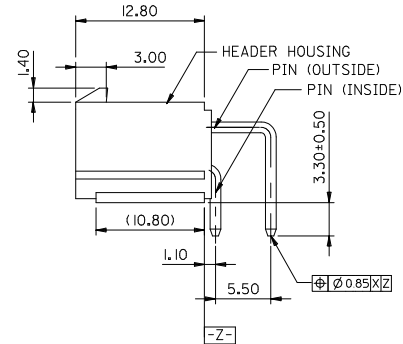
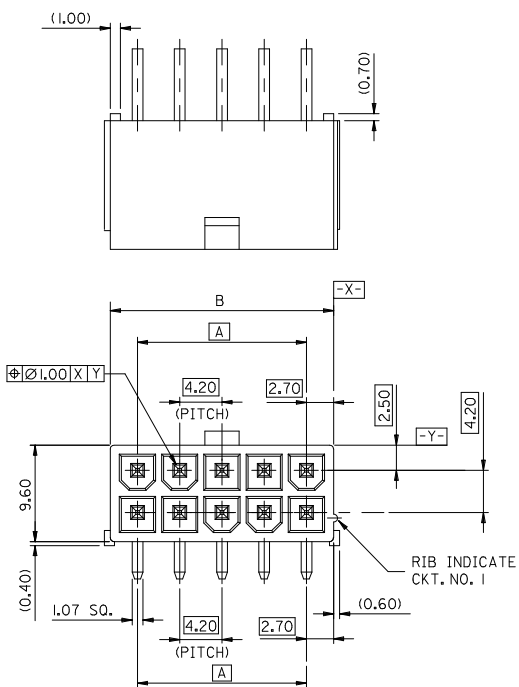
Material Info

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

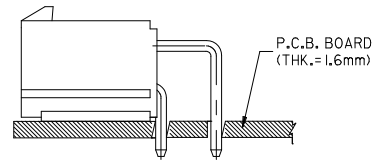
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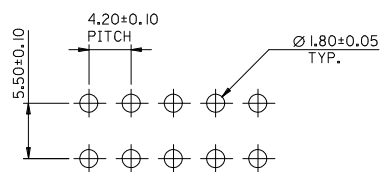
ISOMETRIC VIEW

LEGEND

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



RECOMMENDED INSTALLATION PATTERN

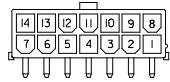


RECOMMENDED P.C.B. LAYOUT

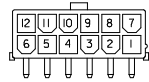
NOTES

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

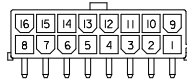
CORRECT TOLERANCE EC NO: UCP2010-0395 DRAWN: JAGUILAR 2010/04/09 CHKD: EDMUD 1995/03/01 APPR: FSMITH 2010/04/09	REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		= 0 = 0	mm	INCH	DRAWN BY STEVEN	DATE 1995/02/27	TITLE 4.2MM W-T-B HIGH TEMP. RIGHT ANGLE HEADER WITHOUT MOUNTING FLANGES				
			4 PLACES ± ---	± ---	CHECKED BY EDMUD	DATE 1995/03/01					
			3 PLACES ± ---	± ---	APPROVED BY FSMITH	DATE 2010/04/09	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-87427-**0*	SHEET NO. 1 OF 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± ---°		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



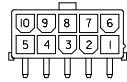
CKT.SIZE 14



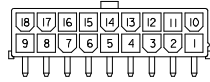
CKT.SIZE 12



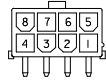
CKT.SIZE 16



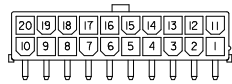
CKT.SIZE 10



CKT.SIZE 18



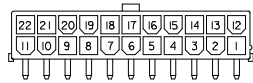
CKT.SIZE 8



CKT.SIZE 20



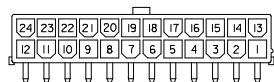
CKT.SIZE 6



CKT.SIZE 22



CKT.SIZE 4



CKT.SIZE 24



CKT.SIZE 2

SEE NOTES Δ 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. TUBE PACKED	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. TRAY PACKED	CKT. SIZE

EC NO: I2009-0573 DRWN: HMR01 2009/11/11 CHKD: KPRASAD 2009/11/12 APPR: KPRASAD 2009/11/13	QUALITY SYMBOLS $\nabla=0$ $\square=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES \pm --- \pm --- 3 PLACES \pm --- \pm --- 2 PLACES \pm 0.20 \pm --- 1 PLACE \pm 0.20 \pm --- ANGULAR \pm ---°	DRAWN BY SAMC	DATE 1996/02/05	TITLE 4.2MM W-T-B,HIGH TEMP. RIGHT ANGLE HEADER WITHOUT MOUNTING FLANGES	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY	DATE	MOLEX INCORPORATED	
		SIZE A3	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-87427-**0*	SHEET NO. 2 OF 2	