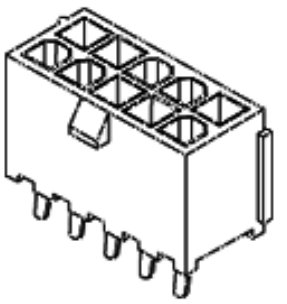
This document was generated on 05/31/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0874271642
Status: Active
Overview: minifit_jr
Description: 4.20mm (.165") Mini-Fit Jr.™ Header, Vertical, Nylon, without Flange, 16Circuits, Tin (Sn) over Nickel (Ni) Plating, Glow Wire Compatible



Series image - Reference only

Documents:

- 3D Model
- Drawing (PDF)
- Product Specification PS-87427-0001 (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 Crimpted 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)	16
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 Reviewed

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

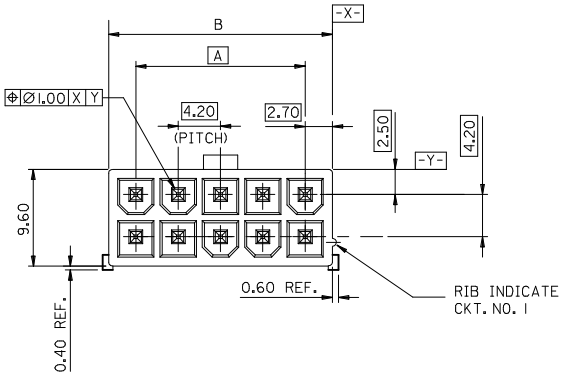
Solder Process Data

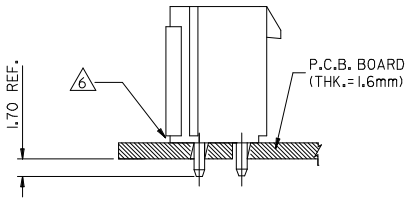
Duration at Max. Process Temperature (seconds)	30
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	2
Process Temperature max. C	240

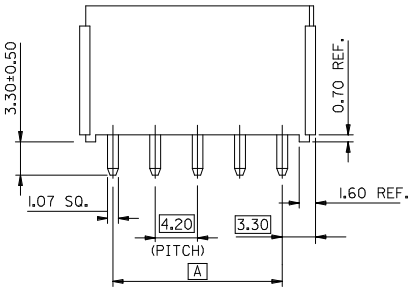
Material Info

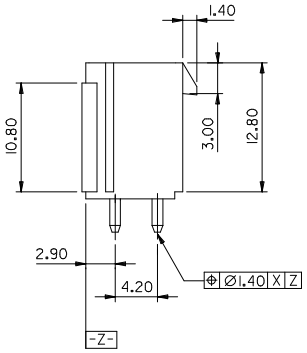
Reference - Drawing Numbers

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









RECOMMENDED INSTALLATION PATTERN

LEGEND

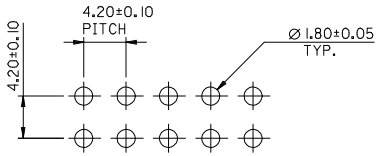
87427-**4*

CKT. SIZE

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

NOTES

1. MATERIAL - HOUSING : 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
   GOLD 0.76um MIN. OVER NICKEL 1.27um MIN.
5. PLATING OF PIN
   TIN 2.54μm MIN. OVER NICKEL 1.27μm MIN. WITH MATT FINISH
6. 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: 12009-0573
DRWN:HMR01 2009/11/11
CH'KD:KPRASAD 2009/11/12
APPR:KPRASAD 2009/11/13
DESCRIPTION
D
REV

QUALITY SYMBOLS
▼=0
Ⓒ=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

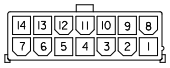
DIMENSION STYLE: MM ONLY
SCALE: 2:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: SAM.C DATE: 960401
CHECKED BY: DATE:
APPROVED BY: DATE:

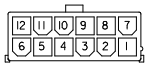
TITLE: 4.2MM W-T-B HIGH TEMP VERT. HEADER W/O FLANGES

MOLEX INCORPORATED

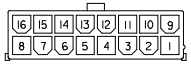
MATERIAL NO.: SEE SHEET 2
DOCUMENT NO.: SD-87427-**4*
SHEET NO.: 1 OF 2
SIZE: A3



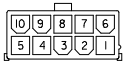
CKT. SIZE 14



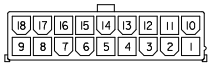
CKT. SIZE 12



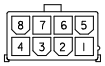
CKT. SIZE 16



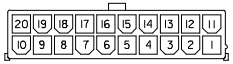
CKT. SIZE 10



CKT. SIZE 18

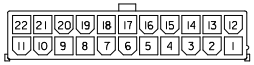


CKT. SIZE 8



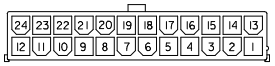
CKT. SIZE 20

CKT. SIZE 6



CKT. SIZE 22

CKT. SIZE 4



CKT. SIZE 24

CKT. SIZE 2

SEE NOTE 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 2009/11/11
DRWN:HMR01 2009/11/12
CH'KD:KPRASAD 2009/11/13
APPR:KPRASAD
DESCRIPTION
REV
D

QUALITY SYMBOLS
▼=0
Ⓒ=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
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: SAM.C DATE: 960415
CHECKED BY: DATE:
APPROVED BY: DATE:
MATERIAL NO.: SEE CHART

TITLE: 4.2MM W-T-B HIGH TEMP VERT. HEADER W/O FLANGES

molex MOLEX INCORPORATED

DOCUMENT NO.: SD-87427-**4*
SHEET NO.: 2 OF 2

SIZE A3