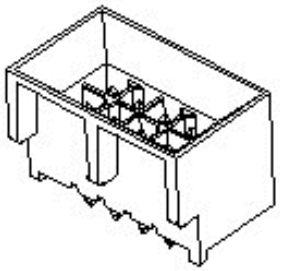
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Part Number: 0452802003
Status: Active
Overview: microfit_30
Description: 3.00mm (.118") Pitch Micro-Fit 3.0 BMI CPI™ Compliant Pin Header, Blind Mate Interface, Dual Row, Vertical, 20 Circuits, PA Polyamide Nylon 4/6, UL 94V-0, 0.76µm (30µ") Gold (Au) Selective Contact Plating, Tin/Lead (Sn/Pb) Tail Plating



Series image - Reference only

Documents:

- 3D Model
- Drawing (PDF)
- Product Specification PS-44300-001 (PDF)
- RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
TUV	R72081037
UL	E29179

General

Product Family	PCB Headers
Series	45280
Application	Board-to-Board, Wire-to-Board
Application Tooling Part Link	622008400
Overview	microfit_30
Product Literature Order No	USA-106
Product Name	Micro-Fit 3.0 BMI CPI™

Physical

Breakaway	No
Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Black
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	None
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Gold
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.189 In
PC Tail Length (mm)	4.80 mm
PCB Locator	Yes
PCB Retention	Yes
Packaging Type	Tray
Pitch - Mating Interface (in)	0.118 In
Pitch - Mating Interface (mm)	3.00 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.75
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	No

EU RoHS
RoHS Compliant by Exemption
REACH SVHC
Contains SVHC: No
Halogen-Free Status
Not Halogen-Free

China RoHS

50
Pb

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
45280Series

Mates With
44769-2003 Vertical Receptacle Header, 44764-2003 Right Angle Receptacle Header, 44133-2000 Panel Mount Receptacle

Application Tooling | **FAQ**

Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.

Global

Description	Product #
Micro-Fit™ Compliant Pin Insertion Flat Rock Tool	0622008400

Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole - Compliant Pin

Electrical

Current - Maximum per Contact	5A
Voltage - Maximum	250V

Solder Process Data

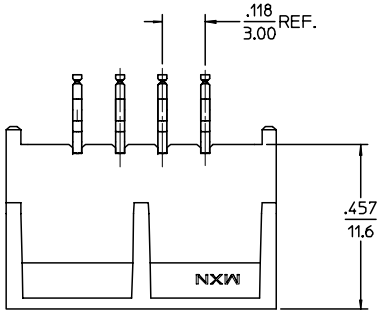
Replacement RoHS Compliant Part Number	0452802053

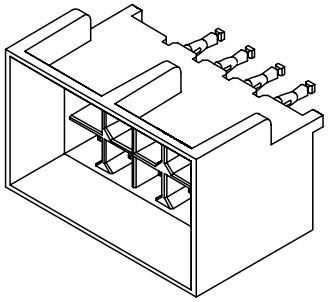
Material Info

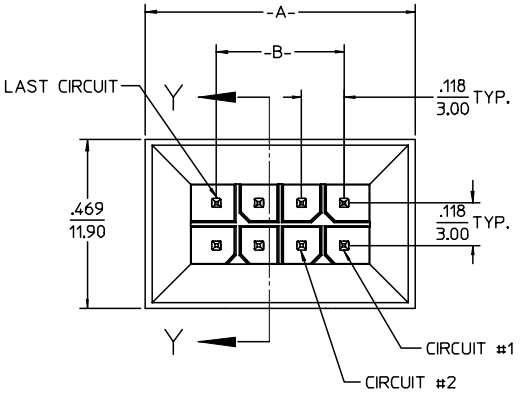
Reference - Drawing Numbers

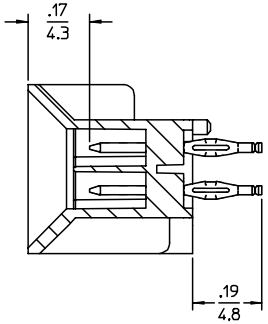
Packaging Specification	PK-45280-002
Product Specification	PS-44300-001, RPS-44300-001
Sales Drawing	SD-45280-001
Test Summary	TS-45280-001

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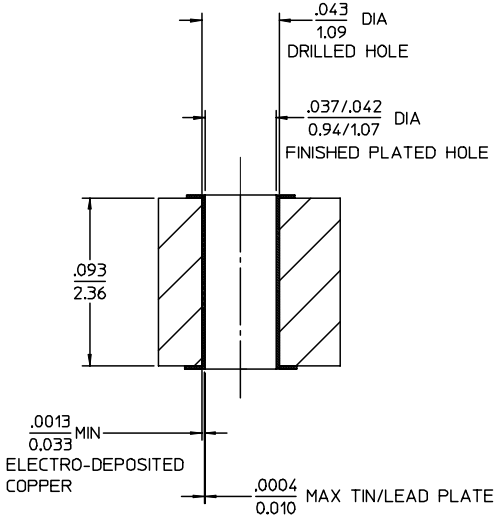








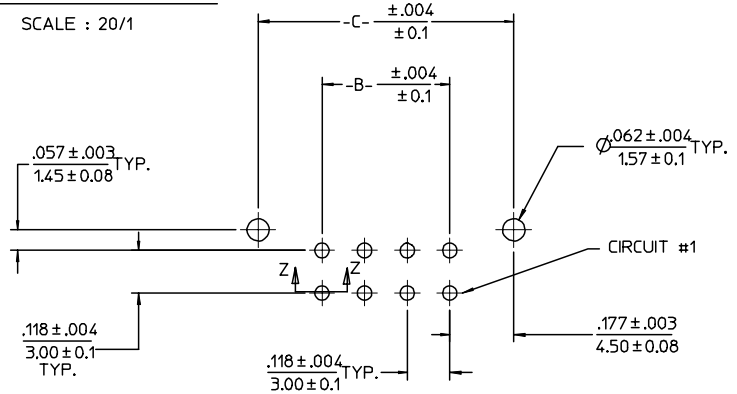
SECTION Y-Y



SECTION Z-Z

SCALE : 20/1

CIRCUIT SIZE	DIM. -A-	DIM. -B-	DIM. -C-
04	.512/13.00	.118/3.00	.472/12.00
06	.630/16.00	.236/6.00	.590/15.00
08	.748/19.00	.354/9.00	.709/18.00
10	.866/22.00	.472/12.00	.827/21.00
12	.984/25.00	.590/15.00	.945/24.00
14	1.102/28.00	.709/18.00	1.063/27.00
16	1.220/31.00	.827/21.00	1.181/30.00
18	1.338/34.00	.945/24.00	1.299/33.00
20	1.457/37.00	1.063/27.00	1.417/36.00
22	1.575/40.00	1.181/30.00	1.535/39.00
24	1.693/43.00	1.299/33.00	1.653/42.00



RECOMMENDED PCB LAYOUT
(COMPONENT SIDE)
RECOMMENDED PCB THICKNESS .093/2.36 MIN.

NOTES:

1. MATERIALS:
   HOUSING: GLASS FILLED NYLON, UL94V-0, COLOR: BLACK.
   TERMINALS: COPPER ALLOY.
2. FINISH:
   A= .000200/(0.00508) MIN. BRIGHT TIN OVER .000050/(0.00127) MIN. NICKEL.
   B= .000015/(0.00038) MIN. GOLD IN CONTACT AREA AND .000100/(0.00254) MIN. TIN/LEAD (90/10) ON PCB TAILS BOTH OVER .000050/(0.00127) MIN. NICKEL OVERALL.
   C= .000030/(0.00076) MIN. GOLD IN CONTACT AREA AND .000100/(0.00254) MIN. TIN/LEAD (95/05) ON PCB TAILS BOTH OVER .000050/(0.00127) MIN. NICKEL OVERALL.
   D= .000200/(0.00508) MIN. MATTE TIN IN CONTACT AREA AND .000100/(0.00254) MIN. MATTE TIN ON PCB TAILS BOTH OVER .000050/(0.00127) MIN. NICKEL. OVERALL.
3. PRODUCT SPECIFICATION: PS-44300-001
4. PACKAGING SPECIFICATION: PK-45280-002.
5. THIS ASSEMBLY MATES WITH MOLEX BMI PANEL MOUNT RECEPTACLE
   (SEE DRAWING SD-44133-001) WITH FEMALE CRIMP TERMINAL
   (SEE DRAWING SD-43030-****) AND BMI RECEPTACLE HEADERS
   (SEE DRAWING SD-44764-001 OR SD-44769-001).
6. THIS HEADER REQUIRES A MOLEX INSERTION TOOL (62200-8400) TO PROPERLY INSTALL IT TO THE PCB.

ADD "D" FINISH 2007/04/24
EC NO: UCP2007-2424 2007/04/24
DRWN:MKIPPER CHKD:SSOUSEK 2007/04/24
APPR:FSMITH 2007/04/26
DESCRIPTION
REV
J1

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: MARGULIS DATE: 2002/06/11
CHECKED BY: MARGULIS DATE: 2002/06/11
APPROVED BY: R. FRY DATE: 2002/06/11

TITLE: MICRO-FIT (3.0) DUAL ROW VERTICAL BMI CPI HEADER - ASS'Y

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45280-001
SHEET NO.: 1 OF 2
SIZE: C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

tb_frame_C_P_AM_T
Rev. D 2004/06/28

MATERIAL NUMBER	CIRCUIT SIZE	PLATING OPTION
452800401	04	A
452800402	04	B
452800403	04	C
452800404	04	D
452800601	06	A
452800602	06	B
452800603	06	C
452800604	06	D
452800801	08	A
452800802	08	B
452800803	08	C
452800804	08	D
452801001	10	A
452801002	10	B
452801003	10	C
452801004	10	D
452801201	12	A
452801202	12	B
452801203	12	C
452801204	12	D
452801401	14	A
452801402	14	B
452801403	14	C
452801404	14	D
452801601	16	A
452801602	16	B
452801603	16	C
452801604	16	D
452801801	18	A
452801802	18	B
452801803	18	C
452801804	18	D
452802001	20	A
452802002	20	B
452802003	20	C
452802004	20	D
452802201	22	A
452802202	22	B
452802203	22	C
452802204	22	D
452802401	24	A
452802402	24	B
452802403	24	C
452802404	24	D

ADD "D" FINISH
EC NO: UCP2007-2424 2007/04/24
DRWN:MKIPPER 2007/04/24
CHKD:SSOUSEK 2007/04/26
APPR:FSMITH
DESCRIPTION
REV
J1

QUALITY SYMBOLS
▼=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± 0.25	± .015
1 PLACE	± 0.38	± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: 4:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: MARGULIS DATE: 2002/06/11
CHECKED BY: MARGULIS DATE: 2002/06/11
APPROVED BY: R. FRY DATE: 2002/06/11

TITLE
MICRO-FIT (3.0)
DUAL ROW VERTICAL
BMI CPI HEADER - ASS'Y

molex MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-45280-001
SHEET NO.: 2 OF 2
SIZE: C

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