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Part Number: [0452802452](#)
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, 24 Circuits, PA Polyamide Nylon 4/6, UL 94V-0, 0.38µm (15µ") Gold (Au) Selective Contact Plating, Tin (Sn) Tail Plating

Documents:

[3D Model](#) [Product Specification PS-44300-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [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)	24
Circuits (maximum)	24
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 - Plating Termination	Tin
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)	15
Plating min: Mating (µm)	0.375
Plating min: Termination (µin)	100
Plating min: Termination (µm)	2.5
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No

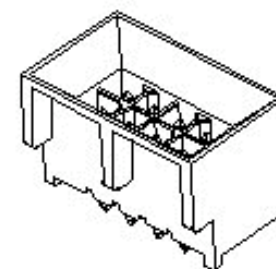


image - Reference only

Series

EU RoHS

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

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

[45280Series](#)

Mates With

[44133-2400](#) Panel Mount Receptacle,
[44769-2402](#) Vertical Receptacle Header,
[44764-2402](#) Right Angle Receptacle Header

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

Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole - Compliant Pin

Electrical

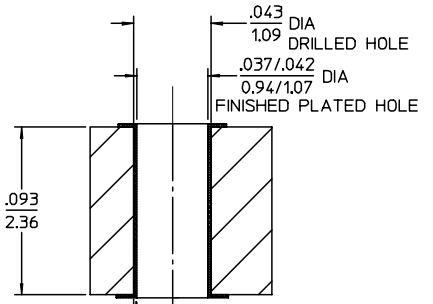
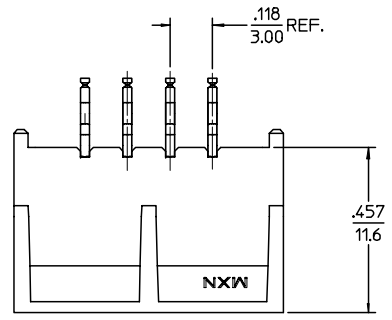
Current - Maximum per Contact	5A
Voltage - Maximum	250V

Material Info**Reference - Drawing Numbers**

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

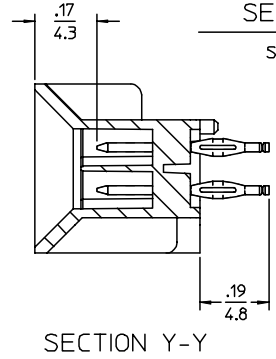
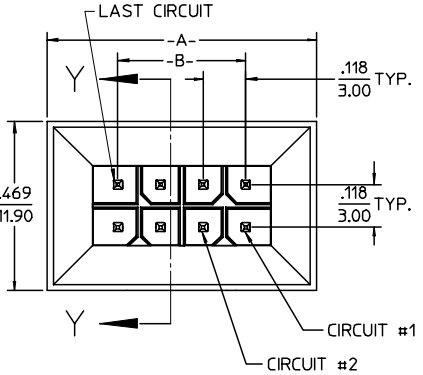
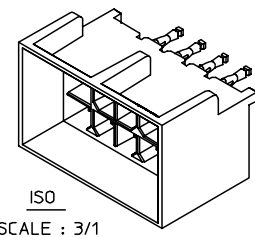
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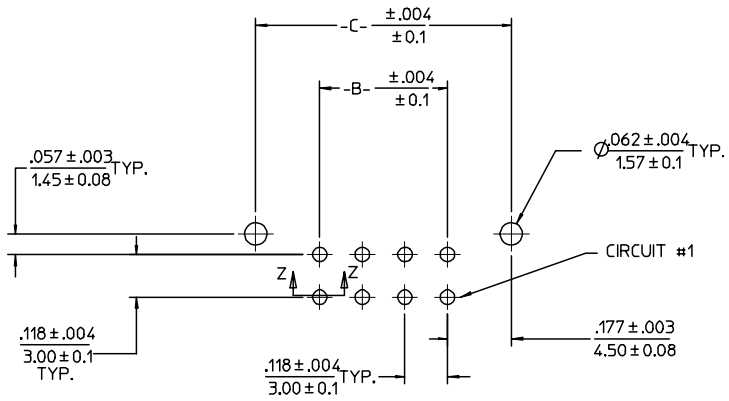


CIRCUIT SIZE	DIM. -A-	DIM. -B-	DIM. -C-	MATERIAL NUMBER	CIRCUIT SIZE	PLATING OPTION
04	.512/13.00	.118/3.00	.472/12.00	452800452	04	B
06	.630/16.00	.236/6.00	.590/15.00	452800453	04	A
08	.748/19.00	.354/9.00	.709/18.00	452800652	06	B
10	.866/22.00	.472/12.00	.827/21.00	452800653	06	A
12	.984/25.00	.590/15.00	.945/24.00	452800852	08	B
14	1.102/28.00	.709/18.00	1.063/27.00	452800853	08	A
16	1.220/31.00	.827/21.00	1.181/30.00	452801052	10	B
18	1.338/34.00	.945/24.00	1.299/33.00	452801053	10	A
20	1.457/37.00	1.063/27.00	1.417/36.00	452801252	12	B
22	1.575/40.00	1.181/30.00	1.535/39.00	452801253	12	A
24	1.693/43.00	1.299/33.00	1.653/42.00	452801452	14	B
				452801453	14	A
				452801652	16	B
				452801653	16	A
				452801852	18	B
				452801853	18	A
				452802052	20	B
				452802053	20	A
				452802252	22	B
				452802253	22	A
				452802452	24	B
				452802453	24	A

.0013 MIN
.0033
ELECTRO-DEPOSITED COPPER
.0004 MAX TIN/LEAD PLATE
0.010



SECTION Z-Z
SCALE: 20/1



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

NOTES:

- MATERIALS:
HOUSING: GLASS FILLED NYLON, UL94V-0, COLOR: BLACK,
TERMINALS: COPPER ALLOY.
- FINISH:
A= .000030/(0.00075) MIN. GOLD IN SELECTIVE AREA AND .00010/(0.0025) MIN TIN ON PCB TAILS BOTH OVER .000050/(0.0013) NICKEL OVERALL.
B= .000015/(0.00038) MIN. GOLD IN SELECTIVE AREA AND .00010/(0.0025) MIN TIN ON PCB TAILS BOTH OVER .000050/(0.0013) NICKEL OVERALL.
- PRODUCT SPECIFICATION: PS-44300-001
- PACKAGING SPECIFICATION: PK-45280-002.
- 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).
- THIS HEADER REQUIRES A MOLEX INSERTION TOOL (62200-8400) TO PROPERLY INSTALL IT TO THE PCB.

UPDATE PK SPEC FC NO: UCP2006-2769	QUALITY SYMBOLS =0 =0
DRW:RPR:RIDER 2006/07/24	DESCRIPTION
CHKD:SSOUSEK 2006/07/24	
APPR:FSM:TH 2006/07/31	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES ± --- ± ---	
3 PLACES ± --- ± .010	
2 PLACES ± 0.25 ± .015	
1 PLACE ± 0.38 ± ---	
ANGULAR ±1/2°	

DIMENSION STYLE	
IN/MM	
DRAWN BY	DATE
RHOLTS	2004/07/20
CHECKED BY	DATE
SCHMIDT	2004/07/20
APPROVED BY	DATE
FSMITH	2004/07/20
MATERIAL NO.	
SEE CHART	

SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
MICRO-FIT (3.0) DUAL ROW VERTICAL BMI CPI HEADER-ASSY, LEAD-FREE		
MOLEX MOLEX INCORPORATED		
MATERIAL NO. SD-45280-002	DOCUMENT NO.	SHEET NO. 1 OF 1
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		