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Part Number: [0452801052](#)

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, 10 Circuits, PA Polyamide Nylon 4/6, UL 94V-0, 0.38µm (15µ") Gold (Au) Selective Contact Plating, Tin (Sn) Tail Plating

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)	10
Circuits (maximum)	10
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

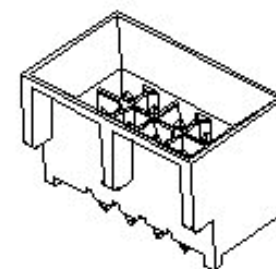


image - Reference only

Series

EU RoHS

ELV and RoHS Compliant

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

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

[45280Series](#)

Mates With

[44133-1000](#) Panel Mount Receptacle,
[44769-1002](#) Vertical Receptacle Header,
[44764-1002](#) 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™	0622008400
Compliant Pin	
Insertion Flat Rock	
Tool	

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

Electrical

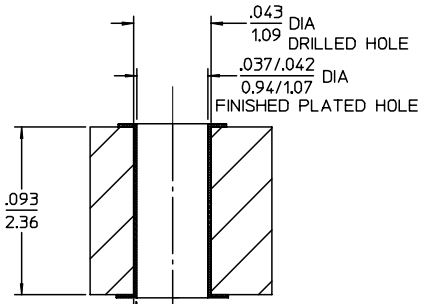
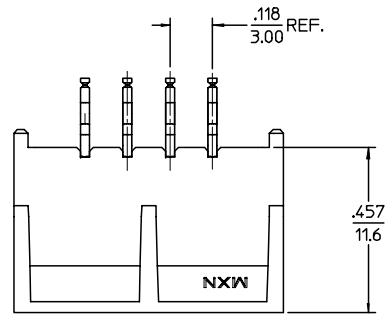
Current - Maximum per Contact	5A
Voltage - Maximum	250V

Material Info**Reference - Drawing Numbers**

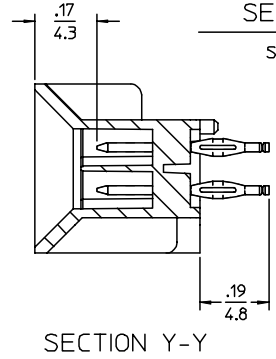
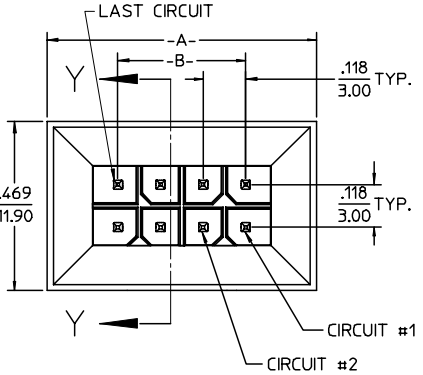
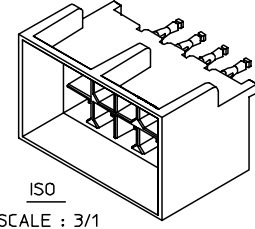
Packaging Specification	PK-45280-002
Product Specification	PS-44300-001, RPS-44300-001
Sales Drawing	SD-45280-002
Test Summary	TS-45280-001

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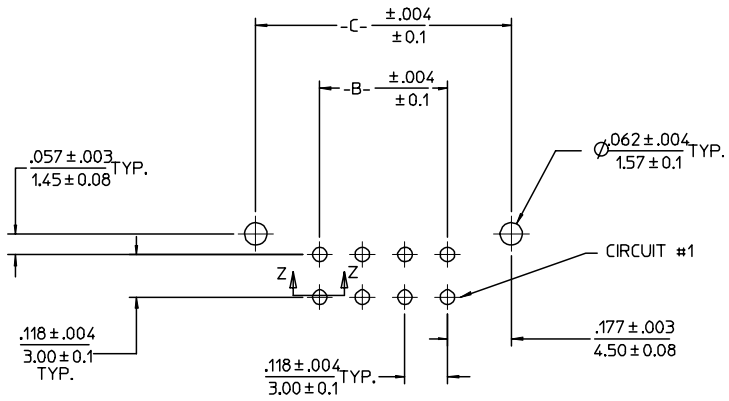
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CIRCUIT SIZE	DIM. -A-	DIM. -B-	DIM. -C-	MATERIAL NUMBER	CIRCUIT SIZE	PLATING OPTION
04	.512/13.00	.118/3.00	.472/12.00	452800452	04	B
06	.630/16.00	.236/6.00	.590/15.00	452800453	04	A
08	.748/19.00	.354/9.00	.709/18.00	452800652	06	B
10	.866/22.00	.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



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 EC NO: UCP2006-2769 DRAWN: RINDER 2006/07/24 CHKD: SDOUSEK 2006/07/24 APPR: F SMITH 2006/07/31 REVISION DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .015 1 PLACE ± 0.38 ± --- ANGULAR ±1/2°	IN/MM DRAWN BY DATE RHLTS 2004/07/20 CHECKED BY DATE SCHMIDT 2004/07/20 APPROVED BY DATE F SMITH 2004/07/20	4:1	METRIC	MICRO-FIT (3.0) DUAL ROW VERTICAL BMI CPI HEADER-ASSY, LEAD-FREE MOLEX MOLEX INCORPORATED
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SD-45280-002	1 OF 1	