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Part Number: [0440680277](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit BMI™ Surface Mount Compatible Header, Dual Row, Vertical, 4 Circuits, 6.35mm (.250") PCB Thickness, with Snap-In Metal Pins, PA Polyamide Nylon 4/6, UL 94V-0, with Gold (Au) Over Nickel (Ni) Plating

Documents:	
3D Model	Product Specification PS-43810-001 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	44068
Application	Board-to-Board, 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.
Product Name	Mini-Fit BMI™

Physical

Breakaway	No
Circuits (Loaded)	4
Circuits (maximum)	4
Color - Resin	Black
Durability (mating cycles max)	30
First Mate / Last Break	No
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Keying to Mating Part	None
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Gold
Material - Plating Termination	Gold
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.335 In
PC Tail Length (mm)	8.50 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.250 In
PCB Thickness Recommended (mm)	6.30 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.165 In
Pitch - Mating Interface (mm)	4.20 mm
Plating min: Mating (µin)	30.4
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	30.4
Plating min: Termination (µm)	0.76

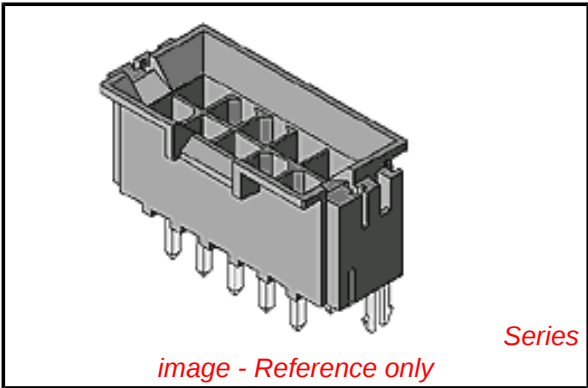


image - Reference only

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.

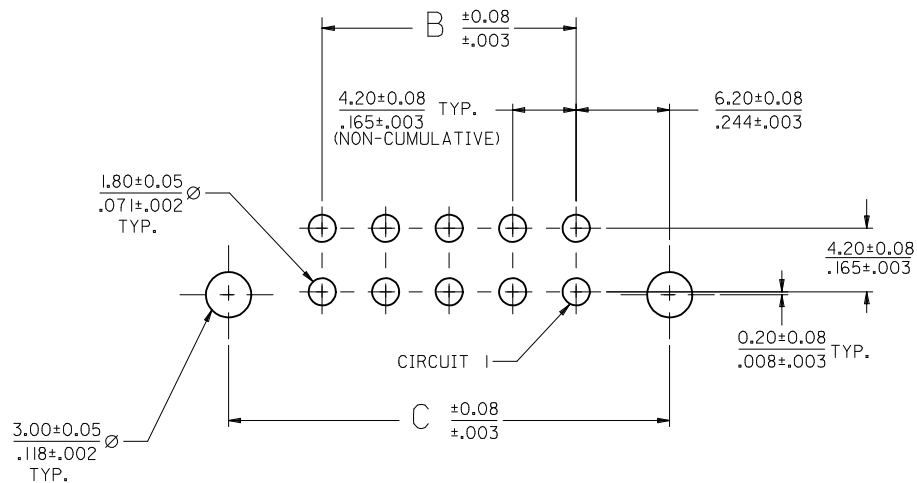
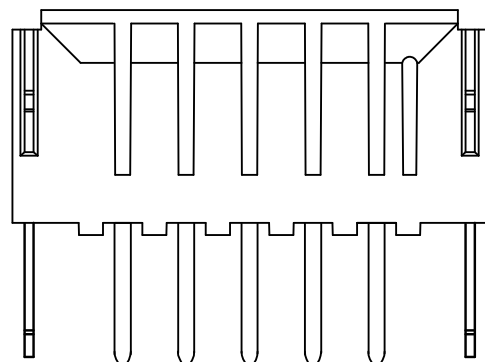
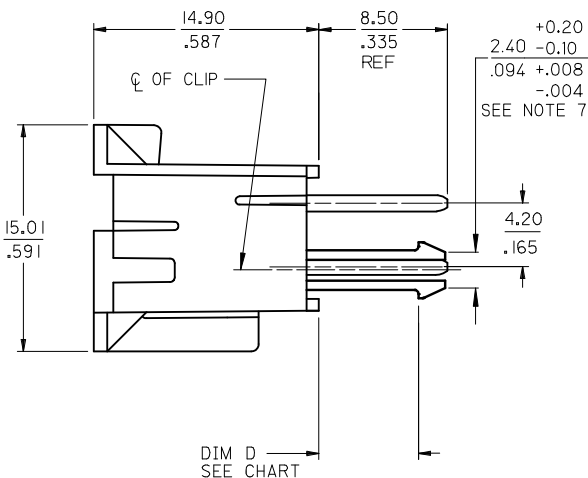
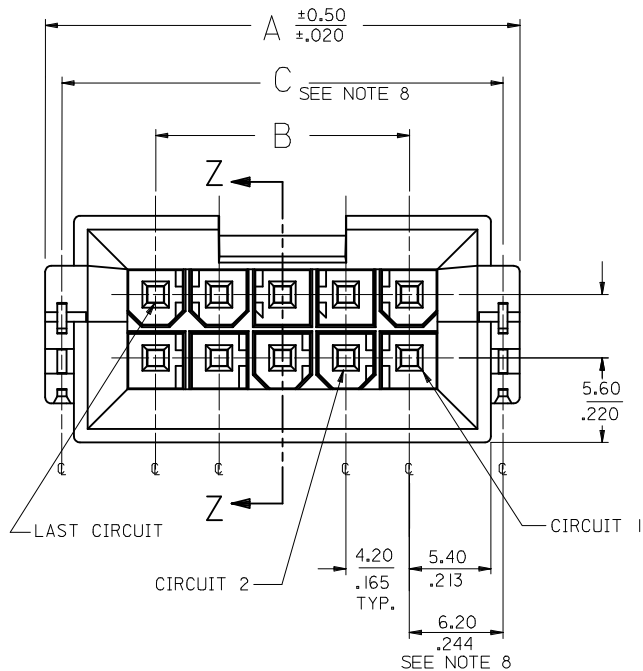
Search Parts in this Series
[44068Series](#)

Mates With
[15-06-0041](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-2045](#) Mini-Fit Jr.™ Receptacle, [15-24-7043](#) Mini-Fit BMI™ Receptacle Header

Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	Yes
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)	3
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235
Material Info	
Reference - Drawing Numbers	
Packaging Specification	PK-43879-002
Product Specification	PS-43810-001
Sales Drawing	SD-44068-061
Test Summary	TS-43810-001

This document was generated on 05/14/2010

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PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: SEE CHART

NOTES:

1) MATERIALS:

HOUSING: PA46 FILLED BLACK, UL94V-0

TERMINAL: BRASS

BOARD RETENTION CLIP: BRASS

2) FINISHES:

1 = 0.00254/(.000100) MIN TIN OVER NICKEL

2 = 0.00076/(.000030) MIN GOLD OVER NICKEL

3) PRODUCT SPECIFICATIONS: PS-43810-001

4) PACKAGING SPECIFICATION: PK-43879-002

5) PART MATES WITH MOLEX RECEPTACLE #5557 AND #42474, AND #42385 HEADER.

6) PART ALLOWS FOR 1.27/.050 MAX. MIS-ALIGNMENT WITH MATING HOUSINGS IN ANY DIRECTION.

7) CONNECTOR ASSEMBLIES ARE NOT TO BE MATED AND UNMATED WHILE CIRCUITS ARE LIVE.

8) THIS DIMENSION DOES NOT APPLY TO PARTS WITHOUT P.C. BOARD RETENTION CLIPS.

9) THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

CKTS	DIM. "A"	DIM. "B"	DIM. "C"
4	18.81 .740	4.20 .165	16.60 .653
6	23.01 .906	8.40 .331	20.80 .819
8	27.21 1.071	12.60 .496	25.00 .984
10	31.41 1.237	16.80 .661	29.20 1.150
12	35.61 1.402	21.00 .828	33.40 1.315
14	39.81 1.567	25.20 .992	37.60 1.480
16	44.01 1.733	29.40 1.157	41.80 1.646
18	48.21 1.898	33.60 1.323	46.00 1.811
20	52.41 2.063	37.80 1.488	50.20 1.976
22	56.61 2.229	42.00 1.654	54.40 2.142
24	60.81 2.394	46.20 1.819	58.60 2.307

2	C1
1	C2
SHEET	REV

CORRECTED NOTE #2 EC NO: UCP2009-4772 DRAWN: TBENES CHKD: 2009/01/23 APPR: FSMITH 2009/01/26	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .014 1 PLACE ± 0.35 ± --- ANGULAR ± 1/2°	DIMENSION STYLE MM/IN DRAWN BY DATE JI WANG 2000/07/27 CHECKED BY DATE BANDURA 2000/07/27 APPROVED BY DATE EDGLEY 2000/07/27	SCALE 1:1 DESIGN UNITS METRIC TITLE MINI-FIT JR BMI SMC VERTICAL HEADER ASM FOR 6.35/.250 THK PCB MOLEX INCORPORATED	MATERIAL NO. SEE SHEET 2 DOCUMENT NO. SD-44068-061 SHEET NO. 1 OF 2

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

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