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Part Number: [0438100364](#)
Status: **Active**
Description: 4.20mm (.165") Pitch Mini-Fit BMI™ Surface Mount Compatible Header, Dual Row, Right Angle, 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

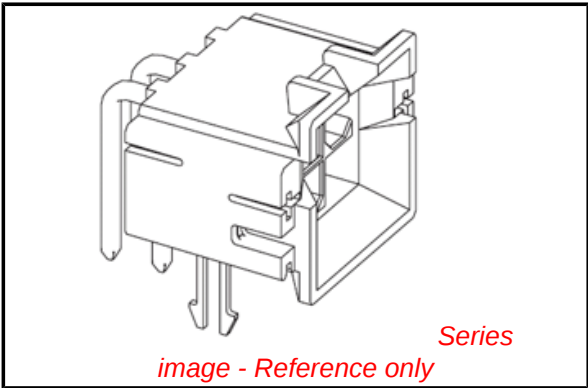
CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	43810
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 SMC™

Physical

Breakaway	No
Circuits (Loaded)	4
Circuits (maximum)	4
Color - Resin	Black
Durability (mating cycles max)	30
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	Yes
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	Right Angle
PC Tail Length (in)	0.200 In
PC Tail Length (mm)	5.08 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.125 In
PCB Thickness Recommended (mm)	3.20 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.165 In
Pitch - Mating Interface (mm)	4.20 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	30
Plating min: Termination (µm)	0.76
Polarized to Mating Part	Yes
Polarized to PCB	Yes



EU RoHS

ELV and RoHS Compliant
REACH SVHC
Not Reviewed
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
[43810Series](#)

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

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

Lead-free Process Capability	SMC & Wave Capable (TH only)
Process Temperature max. C	235

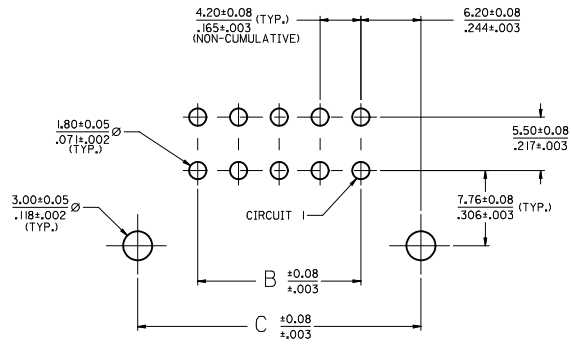
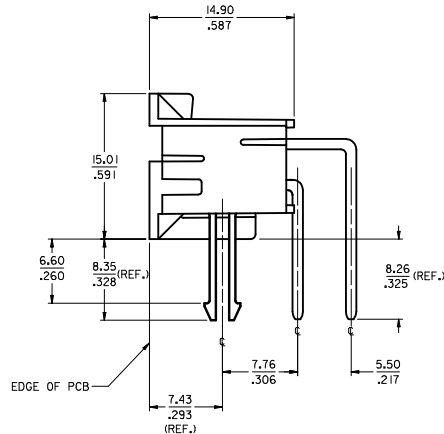
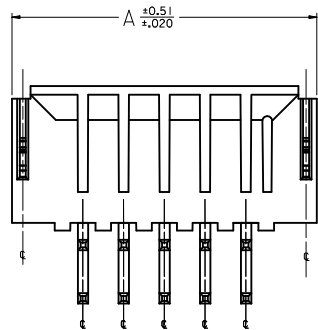
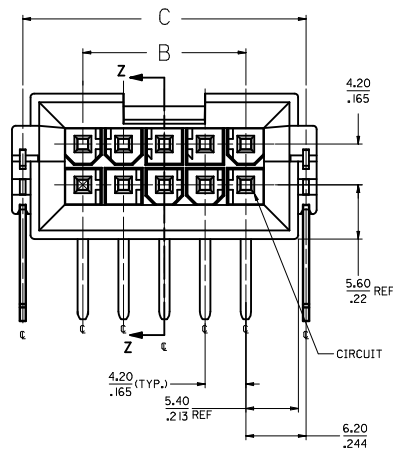
Material Info

Reference - Drawing Numbers

Packaging Specification	PK-43810-001
Product Specification	PS-43810-001
Sales Drawing	SD-43810-071
Test Summary	TS-43810-001

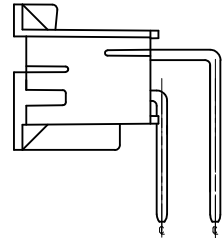
This document was generated on 05/14/2010

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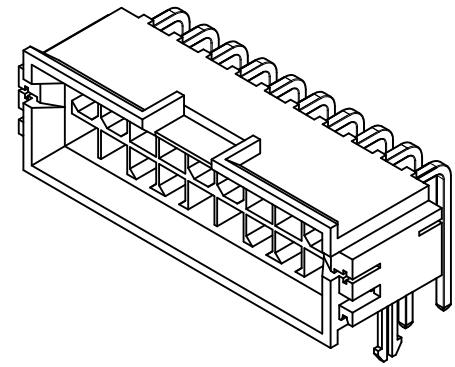


PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 6.35+0.18 / -0.250 (TYP.)

- NOTES
- 1) MATERIALS
HOUSING: NYLON 4/6 UL 94V-0 GLASS FILLED, COLOR: BLACK
TERMINAL: BRASS
BOARD RETENTION CLIP: BRASS
 - 2) FINISHES:
TERMINAL:
1.=(0.00254)/.000100 MIN. BRIGHT TIN OVER
(0.00127)/.000050 MIN. NICKEL
2.=(0.00076)/.000030 MIN. GOLD OVER
(0.00127)/.000050 MIN. NICKEL
3.=(0.00076)/.000030 MIN. SELECT GOLD AND
(0.00254)/.000100 MIN. SELECT MATTE TIN
OVER (0.00127)/.000050 MIN. NICKEL OVERALL
MOUNTING CLIP:
(0.00254)/.000100 MIN. MATTE TIN OVER
(0.00127)/.000050 MIN. NICKEL
 - 3) PRODUCT SPECIFICATION: PS-43810-001
 - 4) PACKAGING SPECIFICATION: PK-43810-001
 - 5) PARTS 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) PARTS ARE NOT DESIGNED FOR CURRENT SHARING
 - 9) DISCOLORATION IN THE BANDOLIER CARRIER AREA OF THE PIN IS INHERENT TO THE PLATING PROCESS AND IS DUE TO THE MASKING EFFECT OF THE CARRIER. THIS DISCOLORATION IS IN A NON-FUNCTIONAL AREA OF THE PIN AND WILL NOT AFFECT THE PERFORMANCE OF THE HEADER ASSEMBLY.
 - 10) PART CONFORMS TO CLASS 'B' REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002



HEADER ASSEMBLY
WITH NO CLIP OPTION



20 CKT SHOWN

2	D
1	D
SHT., REV.	

ADDED PN SHT 2		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO. UCP2010-0715	2010/05/26	MANLAPZ	01-06-97	4 PLACES ± ---	± ---	MM/IN	DATE	4:1	METRIC	MOLEX	MOLEX INCORPORATED	SHEET NO.	1 OF 2
DRWN: JAGUILAR	2010/05/27	CHECKED BY	DATE	3 PLACES ± ---	± .010	DATE	03-26-97						
CHKD: J.BELL	2010/05/27	APPROVED BY	DATE	2 PLACES ± 0.25	± .014	DATE	03-26-97						
APPR: FSW TH	2010/06/04	EDGLEY	03-26-97	1 PLACE ± 0.35	± ---	ANGULAR ± 1/2°							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		MATERIAL NO.		DOCUMENT NO.		SD-43810-071					
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													

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Rev. F 2009/06/18