

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0438100365](#)

**Status:** **Active**

**Description:** 4.20mm (.165") Pitch Mini-Fit BMI™ Surface Mount Compatible Header, Dual Row, Right Angle, 6 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](#)

[Drawing \(PDF\)](#)

[Product Specification PS-43810-001 \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

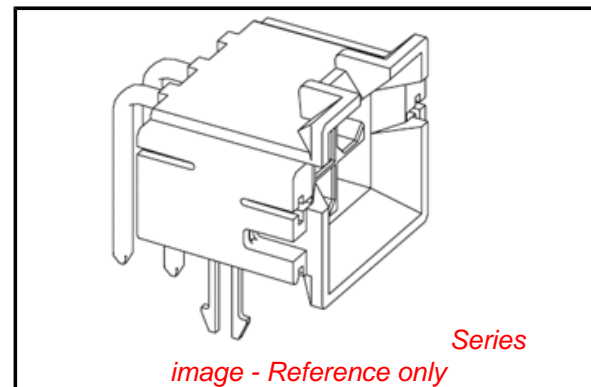
CSA LR19980  
UL E29179

**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) 6  
Circuits (maximum) 6  
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**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto: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.

**China RoHS**



**Search Parts in this Series**

[43810Series](#)

**Mates With**

[15-06-0061](#) Mini-Fit BMI™ Panel Mount Receptacle, [39-01-2065](#) Mini-Fit Jr.™ Receptacle, [15-24-7063](#) 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

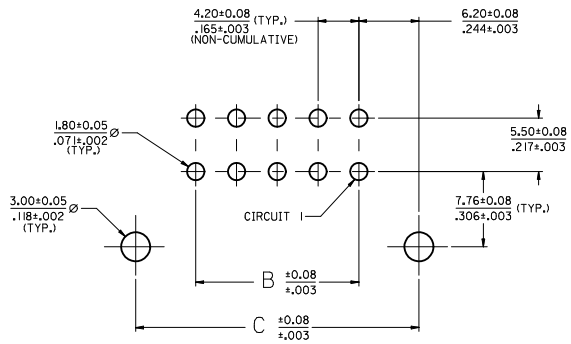
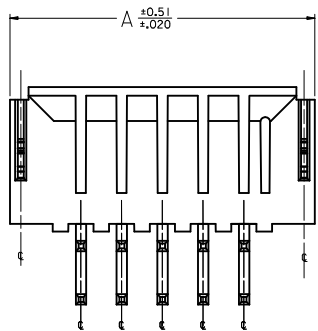
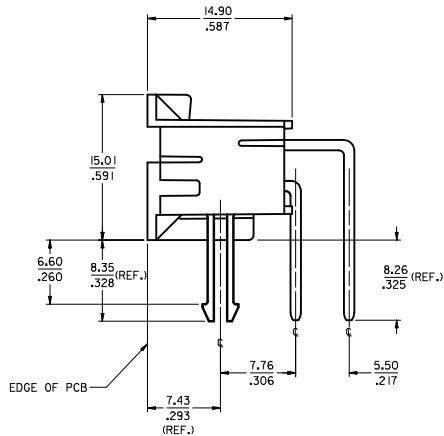
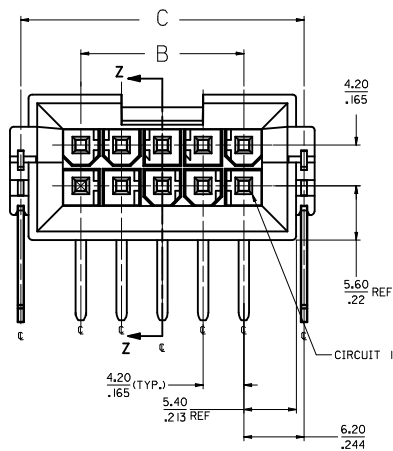
### **Material Info**

### **Reference - Drawing Numbers**

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

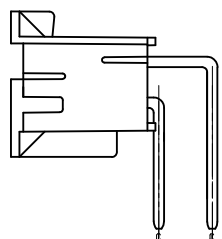
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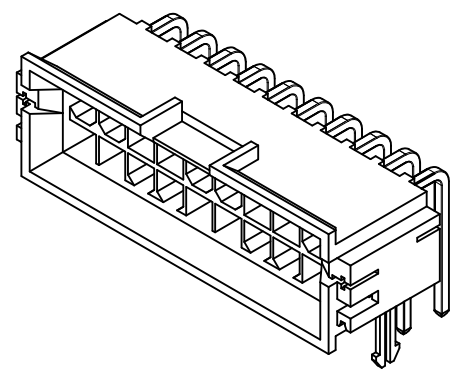


PCB LAYOUT: COMPONENT SIDE  
 RECOMMENDED PCB THICKNESS: 6.35±0.18 / .250±.007

- 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 BANDOLIERY 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 EC NO. UCF2010-0715 DRAWN: JAGUILAR 2010/05/26 CHKD: BELL 2010/05/27 APPR: FSWITH 2010/06/04	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽=0 ▽=0	mm INCH	MM/IN	4:1	METRIC	DRAWN BY: MANLAPZ CHECKED BY: BANDURA APPROVED BY: EDGLEY
	4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .014 1 PLACE ± 0.35 ± --- ANGULAR ±1/2°	DATE: 01-06-97	TITLE: MINI-FIT JR BMI SMC RIGHT ANGLE HEADER ASM FOR 6.35/250 THK. PCB	DATE: 03-26-97	DATE: 03-26-97	MOLEX INCORPORATED MATERIAL NO. SEE CHART DOCUMENT NO. SD-43810-071
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE D	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 1 OF 2	

