

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0015977103](#)
Status: **Active**
Overview: [minifit_tpa](#)
Description: 4.20mm (.165") Pitch Mini-Fit TPA™ Header, Dual Row, Vertical, with Snap-in Plastic Peg PCB Lock, 10 Circuits, Tin (Sn) Plating, without Drain Holes

Documents:

[3D Model](#) [Product Specification PS-5556-003 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
TUV R72081037
UL E29179

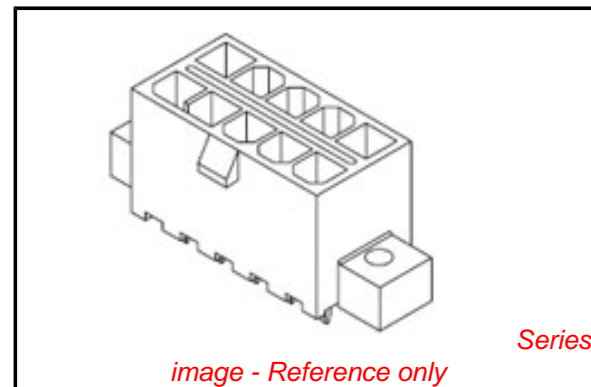
General

Product Family PCB Headers
Series [30069](#)
Application 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.. Square Pin, Solder Type, High Vibration Application

Overview [minifit_tpa](#)
Product Name Mini-Fit TPA™

Physical

Breakaway No
Circuits (Loaded) 10
Circuits (maximum) 10
Color - Resin Black
Durability (mating cycles max) 30
First Mate / Last Break No
Flammability 94V-0
Glow-Wire Compliant No
Guide to Mating Part No
Keying to Mating Part None
Lock to Mating Part Yes
Material - Metal Brass
Material - Plating Mating Tin
Material - Plating Termination Tin
Material - Resin Polyester
Number of Rows 2
Orientation Vertical
PCB Locator Yes
PCB Retention Yes
PCB Thickness Recommended (in) 0.070 In
PCB Thickness Recommended (mm) 1.80 mm
Packaging Type Tray
Pitch - Mating Interface (in) 0.165 In
Pitch - Mating Interface (mm) 4.20 mm
Pitch - Term. Interface (in) 0.165 In
Pitch - Term. Interface (mm) 4.20 mm
Plating min: Mating (µin) 35



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

[30069Series](#)

Mates With

[30067](#) Mini-Fit TPA™ Receptacle Housing

Use With

Mini-Fit TPA™ Receptacle Housing [30071](#) , [30072](#)

Plating min: Mating (µm)	0.90
Plating min: Termination (µin)	35
Plating min: Termination (µm)	0.90
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Shrouded	Partial
Stackable	No
Surface Mount Compatible (SMC)	No
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)	5
Lead-free Process Capability	Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	235

Material Info

Old Part Number	30069-10C1
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Reference - Drawing Numbers

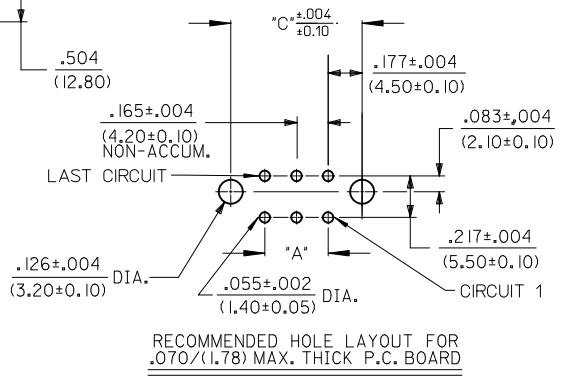
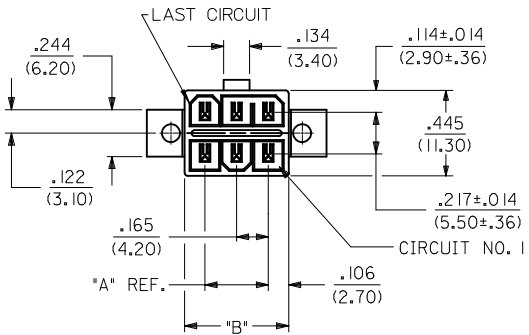
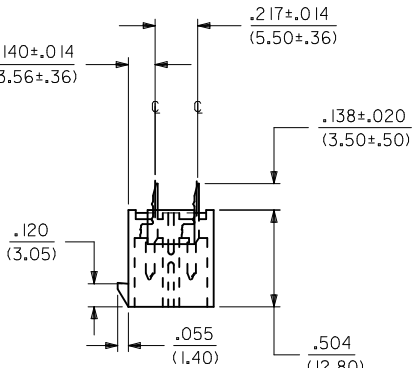
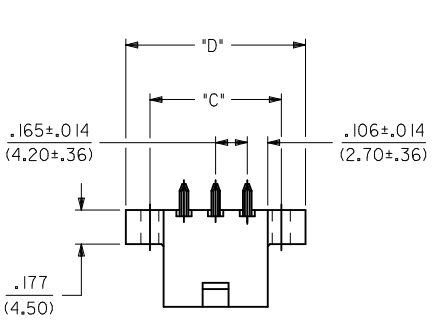
Product Specification	PS-5556-003
Sales Drawing	SDA-30069-****

This document was generated on 05/26/2010

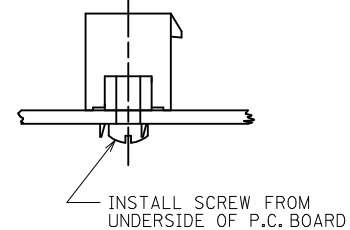
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

NOTES:

- HOUSING MAT'L.: POLYESTER, UNFILLED, 94V-0. COLOR: BLACK.
TERMINAL MATERIAL: BRASS ALLOY 260.
- PLATINGS:
1 = .000035/(.00090) MIN. BRIGHT TIN OVER
.000020/(.00050) MIN. COPPER.
*2 = .000030/(.00076) MIN. SELECT GOLD AND
.000100/(.00254) MIN. SELECT MATTE TIN OVER
.000050/(.00127) MIN. NICKEL OVERALL.
*THE PRIMARY SHIPPING CARTON WILL BE LABELED
"COMPLIANT TO ROHS DIRECTIVE 2002/95/EC
AND ELV ANNEX II OF DIRECTIVE 2000/53/EC."
CARTONS WITHOUT THIS LABEL MAY CONTAIN
PRODUCT WITH TIN-LEAD PLATING.
- PRODUCT SPECIFICATION AND PROCESSING PARAMETERS:
SEE PS-5556-003
- PACKAGING SPECIFICATION: BULK PACKED
- PART IS DESIGNED FOR USE WITH 4-40 OR M3 SCREWS.
- PART MATES WITH RECEPTACLE 30067-*
- THIS PART CONFORMS TO CLASS 'B' REQUIREMENTS OF COSMETIC
SPECIFICATION PS-45499-002.



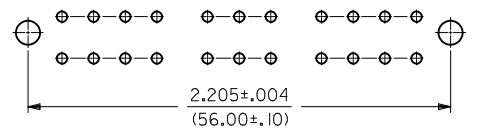
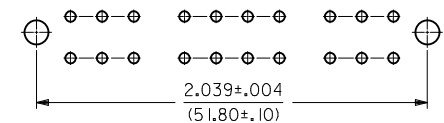
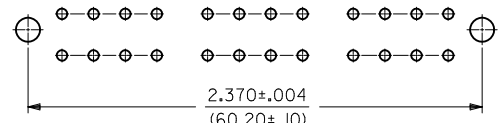
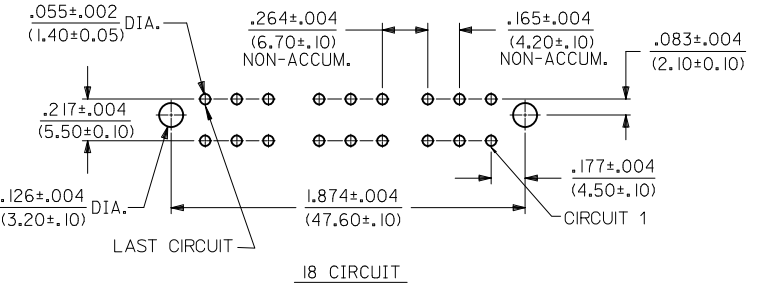
RECOMMENDED HOLE LAYOUT FOR
.070/(1.78) MAX. THICK P.C. BOARD



RECOMMENDED INSTALLATION
OF HEADER TO P.C. BOARD

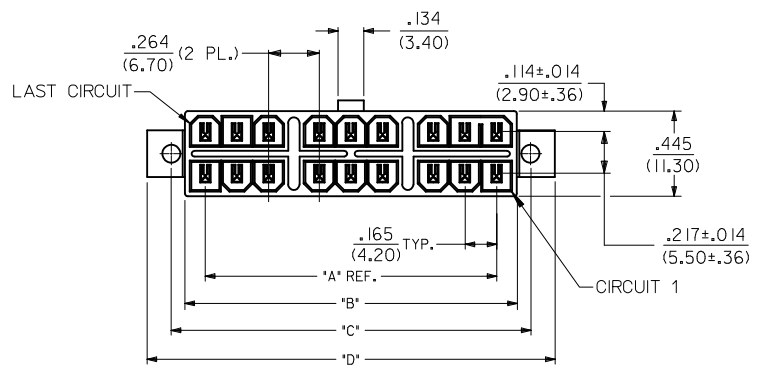
PCB LAYOUT FOR 2-16 CIRCUIT PARTS WITH FLANGES

LAYOUT FOR 18-24 CIRCUIT PARTS WITH FLANGES



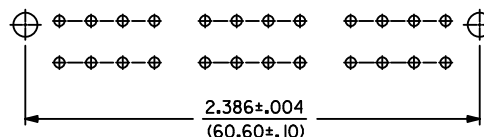
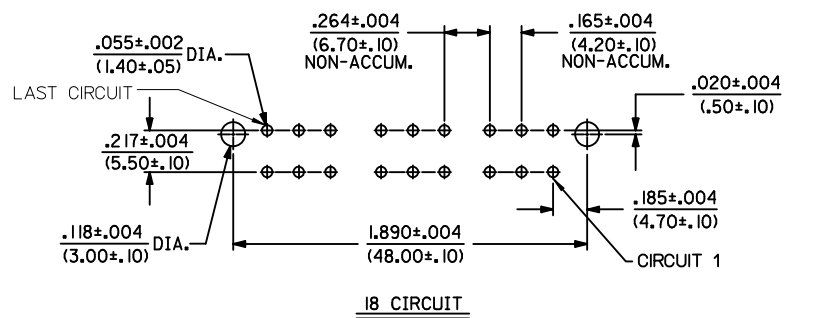
FLANGE MOUNT

(SEE SH. 2 FOR PARTS WITH PEGS)

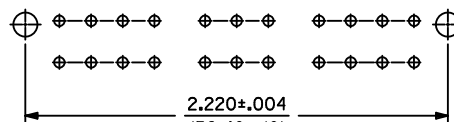


REMOVE DRAIN HOLES EC NO: UCP2009-1388 DRW: JKL/ST/EM/ER 2008/11/25 CHKD: JBEL 2010/02/09 APPR: FSM/TH 2010/05/14 REV:	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES ±</td> <td>---</td> <td>±---</td> </tr> <tr> <td>3 PLACES ±</td> <td>---</td> <td>±.010</td> </tr> <tr> <td>2 PLACES ±</td> <td>0.25</td> <td>±.014</td> </tr> <tr> <td>1 PLACE ±</td> <td>0.36</td> <td>±---</td> </tr> </table> ANGULAR ±1/2°		mm	INCH	4 PLACES ±	---	±---	3 PLACES ±	---	±.010	2 PLACES ±	0.25	±.014	1 PLACE ±	0.36	±---	DIMENSION STYLE IN/MM DRAWN BY: RJF DATE: 9/19/91 CHECKED BY: GEP DATE: 9/19/91 APPROVED BY: RAS DATE: 9/19/91	SCALE: 1:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: MINI-FIT T.P.A. VERTICAL HEADER ASSEMBLY
		mm	INCH																	
	4 PLACES ±	---	±---																	
	3 PLACES ±	---	±.010																	
2 PLACES ±	0.25	±.014																		
1 PLACE ±	0.36	±---																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE CHARTS	DOCUMENT NO. SDA-30069-****	SHEET NO. 1 OF 4																	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																				

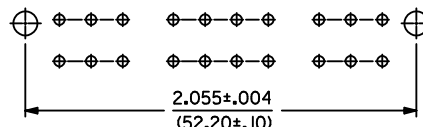
LAYOUT FOR 18-24 CIRCUIT PARTS WITH PEGS



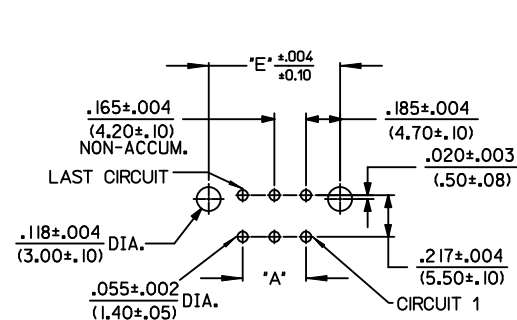
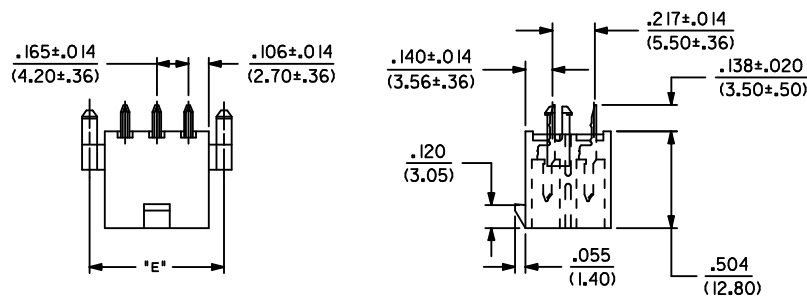
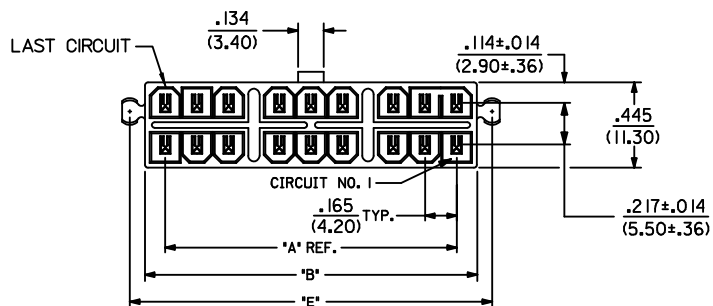
24 CIRCUIT



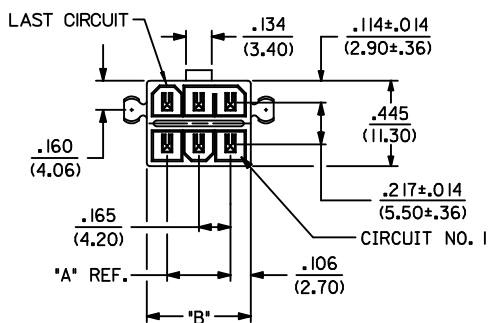
22 CIRCUIT



20 CIRCUIT



RECOMMENDED HOLE LAYOUT FOR
.070/.178 MAX. THICK P.C. BOARD
PCB LAYOUT FOR 2-16 CIRCUIT PARTS



WITH PEGS

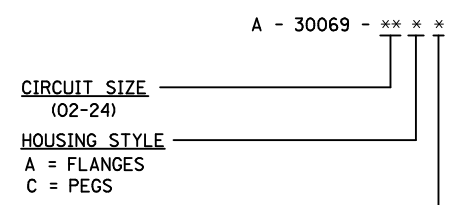
Correct peg-peg dim. EC NO: UCP2009-1388 DRAWN: KLOSTNER/ER 2008/11/25 CHKD: J.BELL 2010/02/09 APPR: F.SMITH 2010/05/14	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0
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GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
4 PLACES ± --- ± ---	mm	DRAWN BY RJF	DATE 9/19/91	TITLE MINI-FIT T.P.A. VERTICAL HEADER ASSEMBLY
3 PLACES ± --- ± .010	INCH	CHECKED BY GEP	DATE 9/19/91	MOLEX INCORPORATED
2 PLACES ± 0.25 ± .014		APPROVED BY RAS	DATE 9/19/91	
1 PLACE ± 0.36 ± ---		MATERIAL NO. SEE CHARTS	DOCUMENT NO. SDA-30069-****	SHEET NO. 2 OF 4
ANGULAR ±1/2°		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

TIN-PLATED ASSEMBLIES WITH PEGS, WITHOUT DRAIN HOLES.							GOLD-PLATED ASSEMBLIES WITH PEGS, WITHOUT DRAIN HOLES.					
CKT. SIZE	ENG. NO.	EDP. NO.	DIM. "A"	DIM. "B"	DIM. "E"	DIM. "D"	ENG. NO.	EDP. NO.	DIM. "A"	DIM. "B"	DIM. "E"	DIM. "D"
2	A-30069-02C1	15-97-7023	—	.213 (5.40)	.370 (9.40)	—	A-30069-02C2	15-97-7025	—	.213 (5.40)	.370 (9.40)	—
4	A-30069-04C1	15-97-7043	.165 (4.20)	.378 (9.60)	.535 (13.60)	—	A-30069-04C2	15-97-7045	.165 (4.20)	.378 (9.60)	.535 (13.60)	—
6	A-30069-06C1	15-97-7063	.331 (8.40)	.543 (13.80)	.701 (17.80)	—	A-30069-06C2	15-97-7065	.331 (8.40)	.543 (13.80)	.701 (17.80)	—
8	A-30069-08C1	15-97-7083	.496 (12.60)	.709 (18.00)	.866 (22.00)	—	A-30069-08C2	15-97-7085	.496 (12.60)	.709 (18.00)	.866 (22.00)	—
10	A-30069-10C1	15-97-7103	.661 (16.80)	.874 (22.20)	1.031 (26.20)	—	A-30069-10C2	15-97-7105	.661 (16.80)	.874 (22.20)	1.031 (26.20)	—
12	A-30069-12C1	15-97-7123	.827 (21.00)	1.039 (26.40)	1.197 (30.40)	—	A-30069-12C2	15-97-7125	.827 (21.00)	1.039 (26.40)	1.197 (30.40)	—
14	A-30069-14C1	NOT TOOLED	.992 (25.20)	1.205 (30.60)	1.362 (34.60)	—	A-30069-14C2	NOT TOOLED	.992 (25.20)	1.205 (30.60)	1.362 (34.60)	—
16	A-30069-16C1	NOT TOOLED	1.157 (29.40)	1.370 (34.80)	1.528 (38.80)	—	A-30069-16C2	NOT TOOLED	1.157 (29.40)	1.370 (34.80)	1.528 (38.80)	—
18	A-30069-18C1	NOT TOOLED	1.520 (38.60)	1.732 (44.00)	1.890 (48.00)	—	A-30069-18C2	NOT TOOLED	1.520 (38.60)	1.732 (44.00)	1.890 (48.00)	—
20	A-30069-20C1	NOT TOOLED	1.685 (42.80)	1.898 (48.20)	2.055 (52.20)	—	A-30069-20C2	NOT TOOLED	1.685 (42.80)	1.898 (48.20)	2.055 (52.20)	—
22	A-30069-22C1	NOT TOOLED	1.850 (47.00)	2.063 (52.40)	2.220 (56.40)	—	A-30069-22C2	NOT TOOLED	1.850 (47.00)	2.063 (52.40)	2.220 (56.40)	—
24	A-30069-24C1	NOT TOOLED	2.016 (51.20)	2.228 (56.60)	2.386 (60.60)	—	A-30069-24C2	NOT TOOLED	2.016 (51.20)	2.228 (56.60)	2.386 (60.60)	—

CKT. SIZE	ENG. NO.	EDP. NO.	DIM. "A"	DIM. "B"	DIM. "E"	DIM. "D"	ENG. NO.	EDP. NO.	DIM. "A"	DIM. "B"	DIM. "E"	DIM. "D"
2												
4												
6												
8												
10												
12												
14												
16												
18												
20												
22												
24												

LEGEND:



PLATING (SEE SHT. 1, NOTE 6.)

1 = TIN OVER COPPER.
2 = GOLD OVER NICKEL.

REMOVE DH P/N'S EC NO: UCP2009-1386 DRAWN: JLOSTNER/ER 2008/11/25 CHKD: JBEL 2010/02/09 APPR: FSM/TH 2010/05/14	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
DESCRIPTION	DESCRIPTION	4 PLACES ± --- INCH	DRAWN BY DATE R/JF 9/19/91	TITLE MINI-FIT T.P.A. VERTICAL HEADER ASSEMBLY		
		3 PLACES ± --- INCH	CHECKED BY DATE GEP 9/19/91	MOLEX INCORPORATED		
		2 PLACES ± --- INCH	APPROVED BY DATE RAS 9/19/91	DOCUMENT NO. SDA-30069-****		
		1 PLACE ± --- INCH	MATERIAL NO.	SHEET NO. 4 OF 4		
		ANGULAR ±1/2°	SEE CHARTS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				