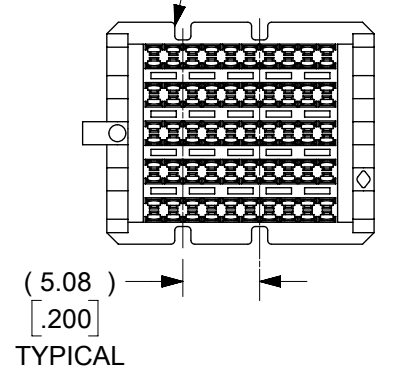
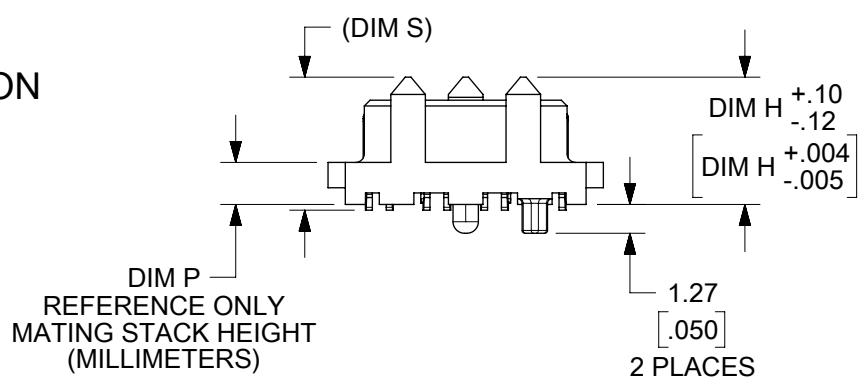
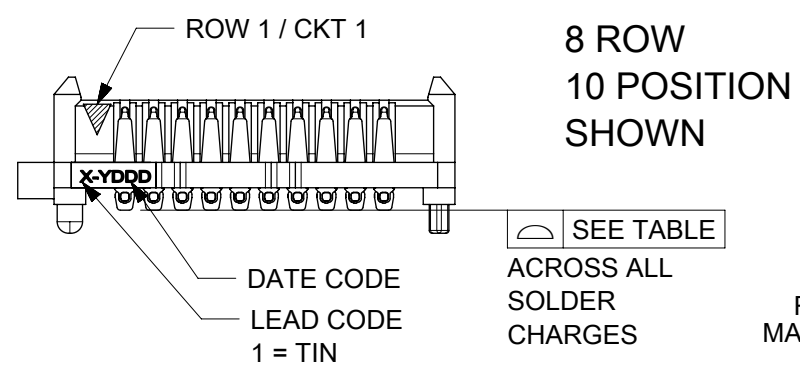


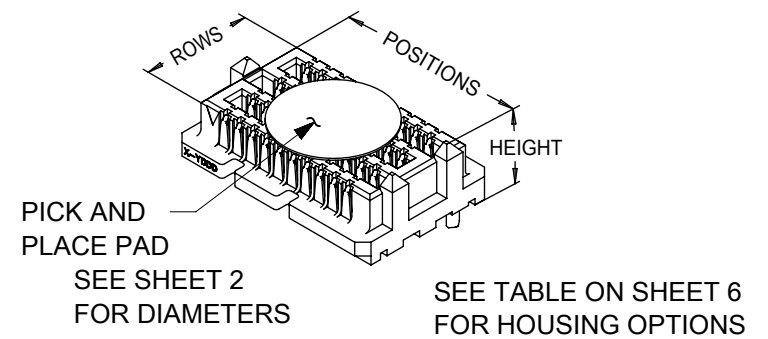
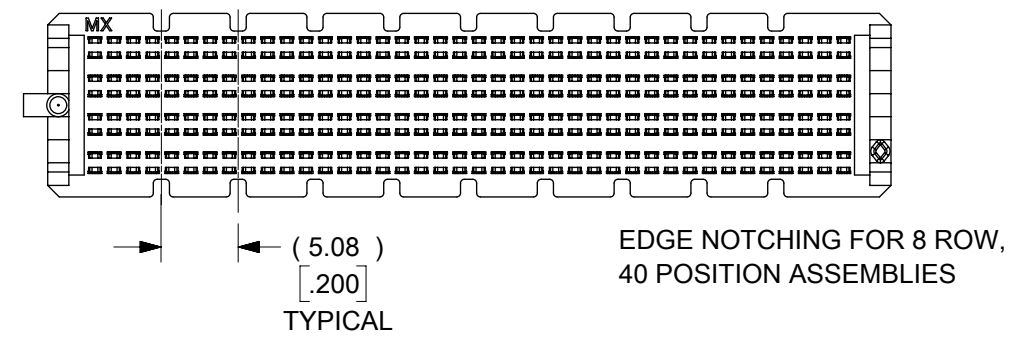
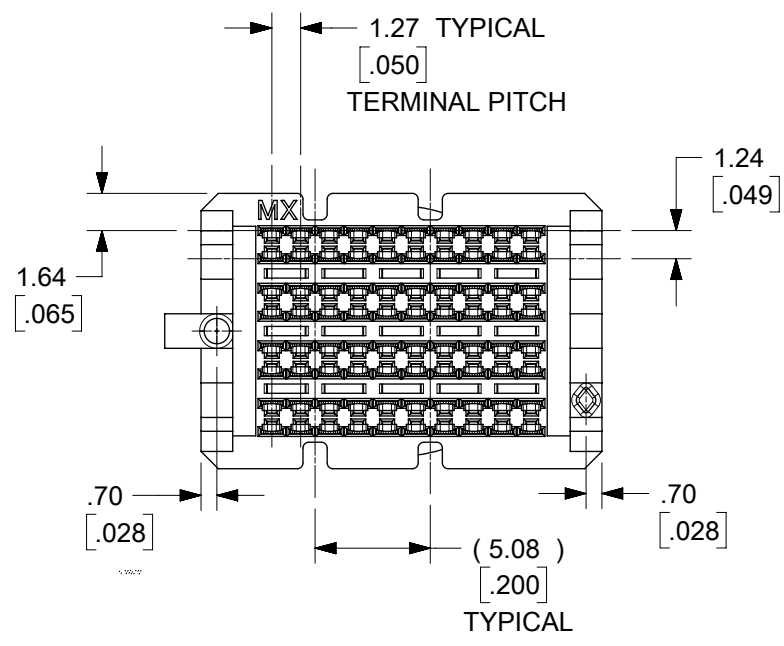
- NOTES:
1. MATERIAL: HOUSING: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER), UL94V-0, BLACK
CONTACTS: COPPER ALLOY
SOLDER CHARGE: 95.5% TIN, 3.8% SILVER, 0.7% COPPER
 2. FINISH: ALL DIM P HEIGHT OPTIONS - SELECT GOLD IN CONTACT AREA: 30 MICROINCH MINIMUM
DIM P HEIGHT OPTIONS 2.0 & 2.5: SELECT GOLD FLASH ON TAIL, 7 MICROINCH MINIMUM
DIM P HEIGHT OPTIONS 3.0 THRU 7.0: SELECT TIN ON TAIL, 50 MICROINCH MINIMUM
ALL OPTIONS - NICKEL UNDERPLATE OVERALL ON TAIL
 3. PRODUCT SPECIFICATION: PS-45970-001
 4. PACKAGING SPECIFICATION: PK-45970-002 (TAPE AND REEL)
 5. MATES WITH SEARAY RECEPTACLE ASSEMBLY SERIES 45971
 6. APPLICATION SPECIFICATION; AS-45970-001
 7. COSMETIC SPECIFICATION: PS-45499-002 CLASS B
 8. PART STATUS: CONTACT MOLEX

EDGE NOTCHES - SEE TABLE
(THE NUMBER OF NOTCHES INCREASES AS THE NUMBER OF POSITIONS INCREASES)



POSITIONS	TOTAL NUMBER OF EDGE NOTCHES			D
	8 ROW	6 ROW	10 ROW	
10	4	4	4	0.15/.006
15	6	6	6	
20	10	10	10	
25	12	12	12	
30	14	14	14	
35	16	16	16	
40	18	20	20	0.23/.009
*40	-	-	*24	
45	22	22	22	
50	24	24	24	
**50	-	-	**28	

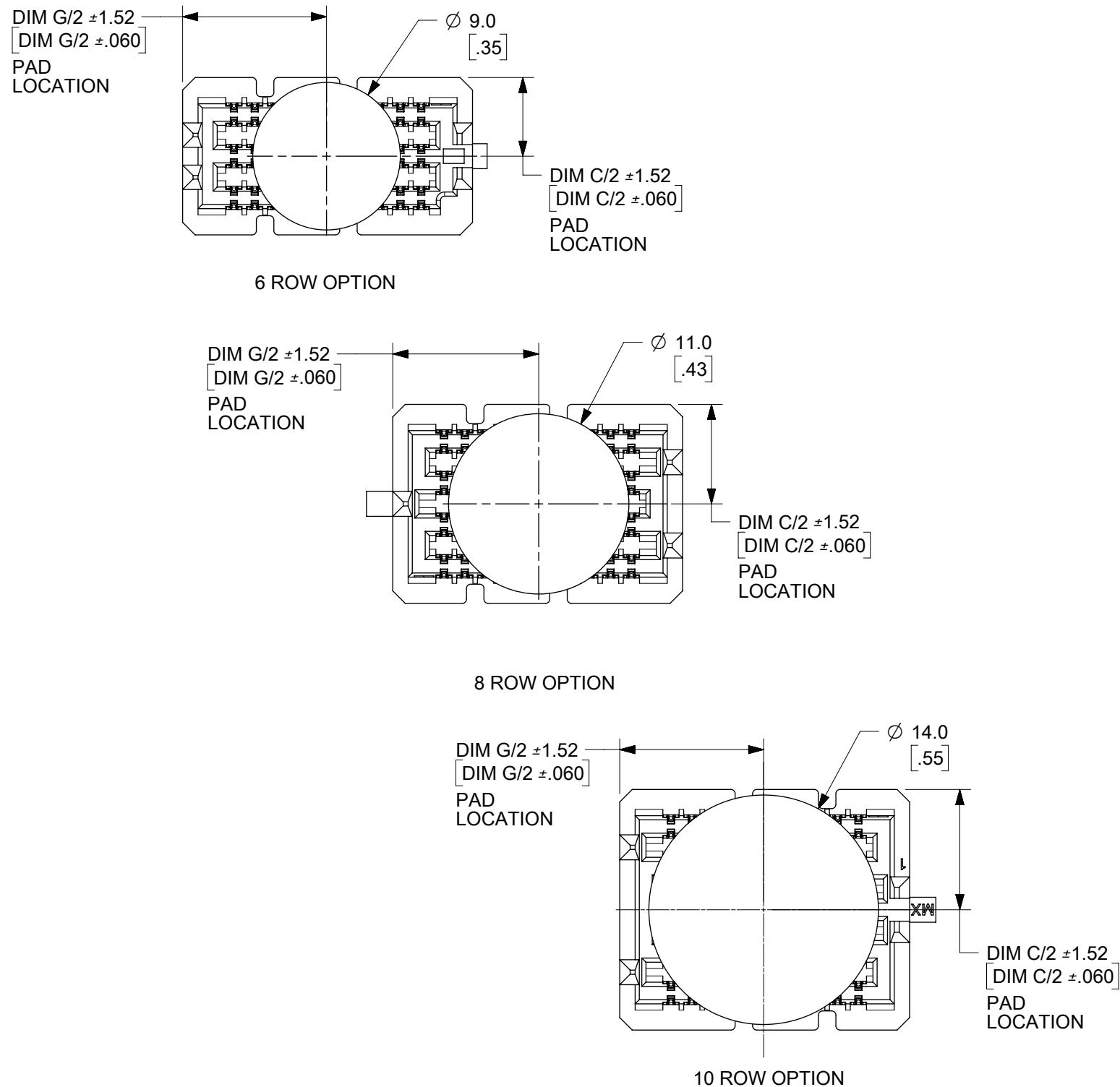
*FOR 45970-4916
**FOR 45970-5916



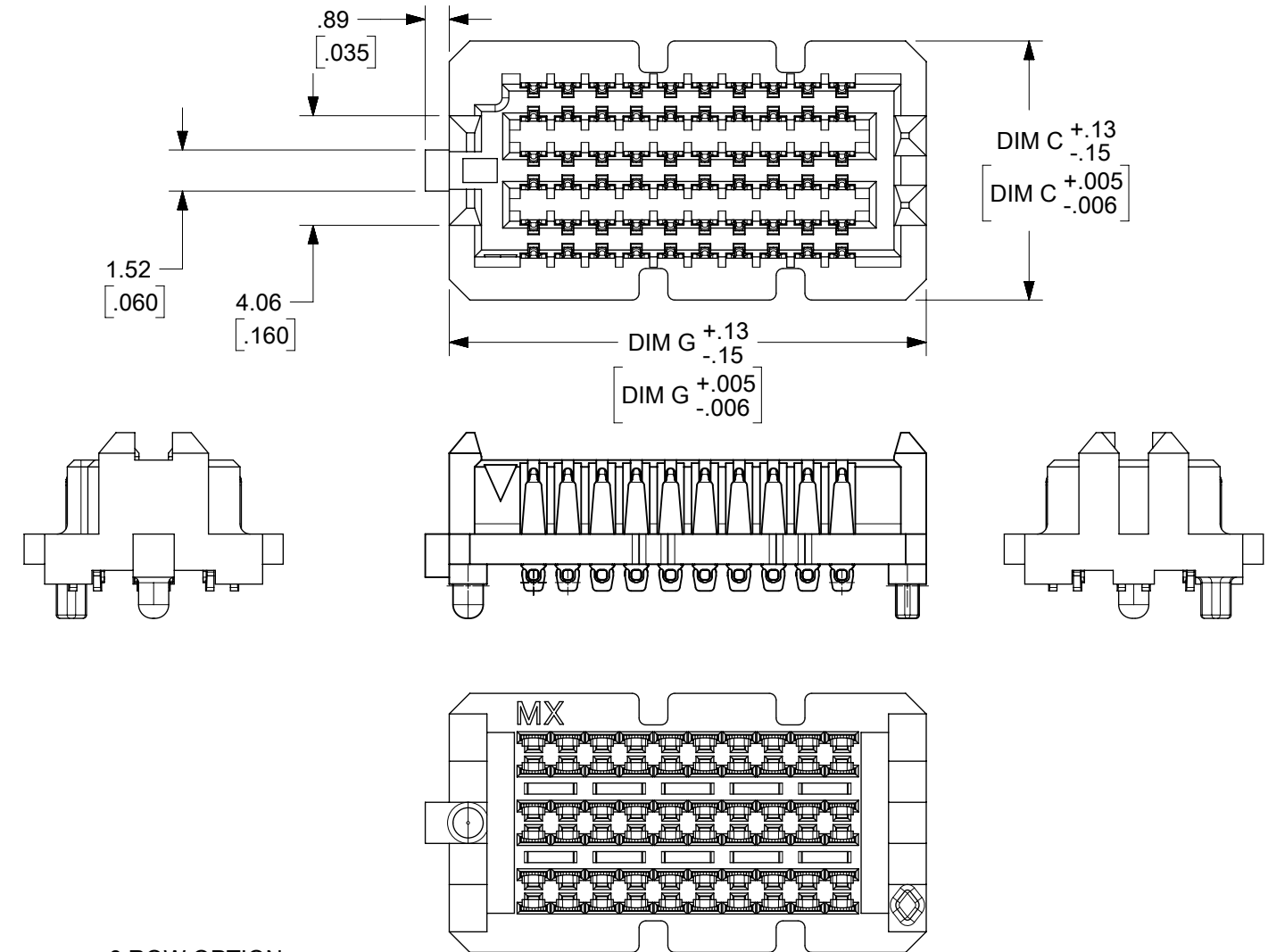
SEE OTHER EDGE NOTCHING VIEWS
SEE SHEET 3
FOR 6 ROW OPTION

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

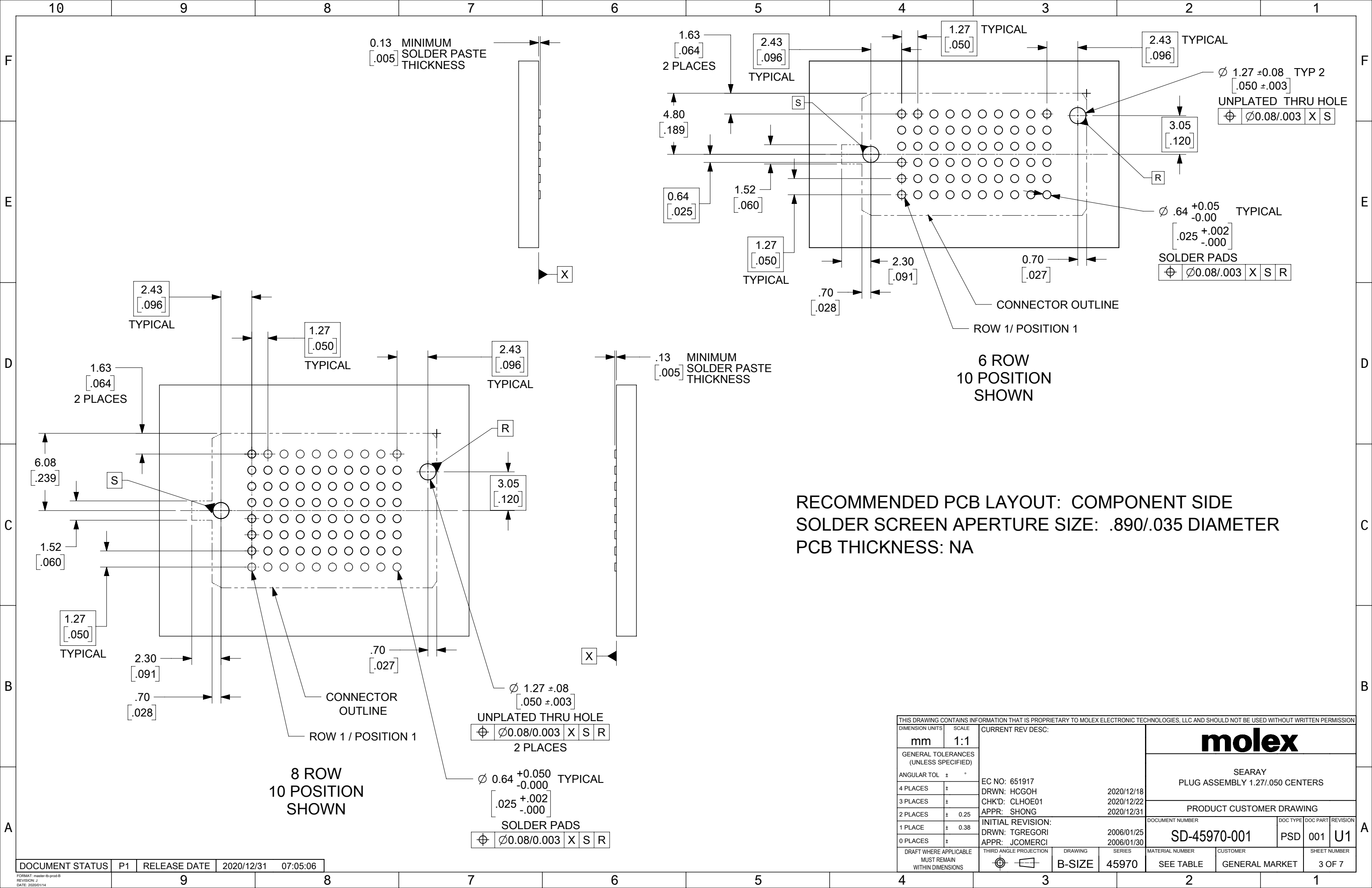
DIMENSION UNITS mm	SCALE 4:1	CURRENT REV DESC:		molex		
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 651917				
ANGULAR TOL ± °		DRWN: HCGOH 2020/12/18		PRODUCT CUSTOMER DRAWING		
4 PLACES ±		CHK'D: CLHOE01 2020/12/22		DOCUMENT NUMBER		
3 PLACES ±		APPR: SHONG 2020/12/31		SD-45970-001		
2 PLACES ± 0.25		INITIAL REVISION:		DOC TYPE	DOC PART	REVISION
1 PLACE ± 0.38		DRWN: TGREGORI 2006/01/25		PSD	001	U1
0 PLACES ±		APPR: JCOMERCI 2006/01/30		SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	
		B-SIZE	45970	SEE TABLE	GENERAL MARKET	1 OF 7



**PICK AND PLACE
 PAD DIAMETERS**
 10 POSITION VERSIONS SHOWN



THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS mm		SCALE 2:1		CURRENT REV DESC:				molex	
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 651917		DRWN: HCGOH		2020/12/18			
ANGULAR TOL ± °		4 PLACES ±		CHK'D: CLHOE01		2020/12/22		PRODUCT CUSTOMER DRAWING	
3 PLACES ±		2 PLACES ± 0.25		APPR: SHONG		2020/12/31			
1 PLACE ± 0.38		INITIAL REVISION:		DRWN: TGREGORI		2006/01/25		DOCUMENT NUMBER	
0 PLACES ±		APPR: JCOMERCI		2006/01/30		SD-45970-001		DOC TYPE DOC PART REVISION	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
		B-SIZE		45970		SEE TABLE		CUSTOMER	
						GENERAL MARKET		SHEET NUMBER	
						2 OF 7			



0.13 MINIMUM
[.005] SOLDER PASTE
THICKNESS

1.63
[.064]
2 PLACES

2.43
[.096]
TYPICAL

1.27
[.050]
TYPICAL

2.43
[.096]
TYPICAL

Ø 1.27 ±0.08 TYP 2
[.050 ±.003]
UNPLATED THRU HOLE
⊕ Ø0.08/.003 X S

Ø .64 +0.05
-0.00 TYPICAL
[.025 +.002
-.000]
SOLDER PADS
⊕ Ø0.08/.003 X S R

4.80
[.189]

1.52
[.060]

1.27
[.050]
TYPICAL

2.30
[.091]

0.70
[.027]

.70
[.028]

CONNECTOR OUTLINE

ROW 1 / POSITION 1

6 ROW
10 POSITION
SHOWN

.13 MINIMUM
[.005] SOLDER PASTE
THICKNESS

2.43
[.096]
TYPICAL

1.27
[.050]
TYPICAL

2.43
[.096]
TYPICAL

1.63
[.064]
2 PLACES

6.08
[.239]

1.52
[.060]

1.27
[.050]
TYPICAL

2.30
[.091]

.70
[.028]

CONNECTOR
OUTLINE

ROW 1 / POSITION 1

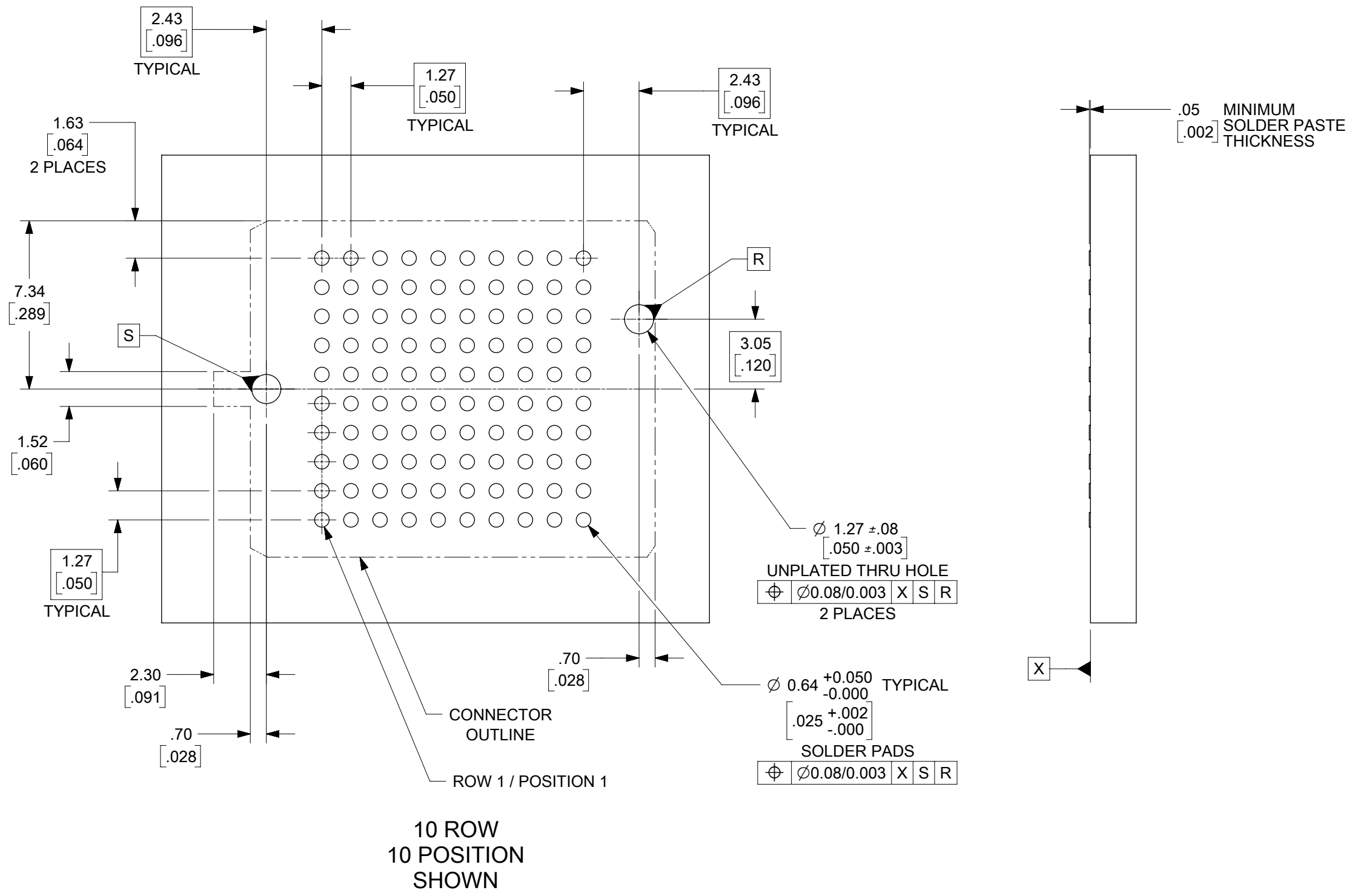
8 ROW
10 POSITION
SHOWN

Ø 1.27 ±0.08
[.050 ±.003]
UNPLATED THRU HOLE
⊕ Ø0.08/0.003 X S R
2 PLACES

Ø .64 +0.050
-0.000 TYPICAL
[.025 +.002
-.000]
SOLDER PADS
⊕ Ø0.08/0.003 X S R

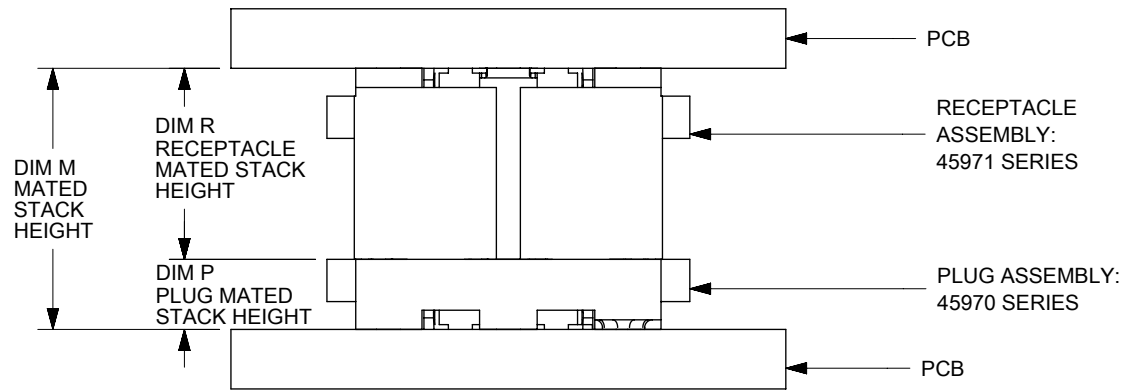
RECOMMENDED PCB LAYOUT: COMPONENT SIDE
SOLDER SCREEN APERTURE SIZE: .890/.035 DIAMETER
PCB THICKNESS: NA

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	1:1	molex SEARAY PLUG ASSEMBLY 1.27/.050 CENTERS PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: SD-45970-001 DOC TYPE: PSD DOC PART: 001 REVISION: U1 MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 3 OF 7							
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± °								
4 PLACES	±								
3 PLACES	±								
2 PLACES	± 0.25	EC NO: 651917	2020/12/18						
1 PLACE	± 0.38	DRWN: HCGOH	2020/12/22						
0 PLACES	±	CHK'D: CLHOE01	2020/12/31						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: SHONG	2020/12/31						
THIRD ANGLE PROJECTION		INITIAL REVISION:							
DRAWING		DRWN: TGREGORI	2006/01/25						
SERIES		APPR: JCOMERCI	2006/01/30						



RECOMMENDED PCB LAYOUT: COMPONENT SIDE
 SOLDER SCREEN APERTURE SIZE: .890/.035 DIAMETER
 PCB THICKNESS: NA

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	5:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)					EC NO: 651917 DRWN: HCGOH CHK'D: CLHOE01 APPR: SHONG INITIAL REVISION: DRWN: TGREGORI APPR: JCOMERCI				
ANGULAR TOL	± °				2020/12/18 2020/12/22 2020/12/31				
4 PLACES	±				PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: SD-45970-001 DOC TYPE: PSD DOC PART: 001 REVISION: U1				
3 PLACES	±								
2 PLACES	± 0.25								
1 PLACE	± 0.38								
0 PLACES	±								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER		
			B-SIZE	45970	SEE TABLE	GENERAL MARKET	4 OF 7		



STACK HEIGHTS
GIVEN IN MILLIMETERS (MM) FOR REFERENCE ONLY

ROWS: 6 DIMENSION C = 9.60/.378		
DIM P:		2.0 mm
DIM H:		5.61/.221
DIM S:		5.86/.231
POSITION	DIM G	MATERIAL NO
30	43.09/1.698	45970-3165

MATING STACK HEIGHTS (DIMENSION P)
GIVEN IN MILLIMETERS (mm) FOR REFERENCE ONLY

mm	DIM R RECEPTACLE STACK HEIGHT									
	5.0		6.0		6.5		7.5		8.0	
	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX
2.0	7.00	7.74	8.00	8.74	8.50	9.24	9.50	10.24	10.00	10.74
2.5	7.50	8.24	8.50	9.24	9.00	9.74	10.00	10.74	10.50	11.24
3.0	8.00	8.74	9.00	9.74	9.50	10.24	10.50	11.24	11.00	11.74
3.5	8.50	9.24	9.50	10.24	10.00	10.74	11.00	11.74	11.50	12.24
4.5	9.50	10.24	10.50	11.24	11.00	11.74	12.00	12.74	12.50	13.24
5.0	10.00	10.74	11.00	11.74	11.50	12.24	12.50	13.24	13.00	13.74
7.0	12.00	12.74	13.00	13.74	13.50	14.24	14.50	15.24	15.00	15.74
9.0	14.00	14.74	15.00	15.74	15.50	16.24	16.50	17.24	17.00	17.74

MATED STACK HEIGHTS
GIVEN IN MILLIMETERS (mm) FOR REFERENCE ONLY

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
DIMENSION UNITS	SCALE	CURRENT REV DESC:				molex				
mm	1:1									
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 651917				SEARAY PLUG ASSEMBLY 1.27/.050 CENTERS				
ANGULAR TOL ± °		DRWN: HCGOH 2020/12/18				PRODUCT CUSTOMER DRAWING				
4 PLACES ±		CHK'D: CLHOE01 2020/12/22				DOCUMENT NUMBER				
3 PLACES ±		APPR: SHONG 2020/12/31				SD-45970-001		DOC TYPE	DOC PART	REVISION
2 PLACES ± 0.25		INITIAL REVISION:				2006/01/25		PSD	001	U1
1 PLACE ± 0.38		DRWN: TGREGORI				2006/01/30				
0 PLACES ±		APPR: JCOMERCI								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER			
			B-SIZE	45970	SEE TABLE	GENERAL MARKET	5 OF 7			

F

F

ROWS: 8 DIMENSION C = 12.14/.478			
DIM P:		2.0 mm	3.5 mm
DIM H:		5.61/.221	7.11/.280
DIM S:		5.86/.231	7.36/.290
POSITION	DIM G	MATERIAL NO	MATERIAL NO
20	30.39/1.198	45970-2185	45970-2385
30	43.09/1.698	45970-3185	45970-3385
40	55.79/2.198	45970-4185	45970-4385
50	68.49/2.698	45970-5185	

E

E

ROWS: 10 DIMENSION C = 14.68/.578										
DIM P:		2.0 mm	3.0 mm	3.5 mm	2.5 mm	4.5 mm	5.0 mm	7.0 mm	9.0 mm	9.0 mm
DIM H:		5.61/.221	6.60/.260	7.11/.280	6.12/.241	8.10/.319	8.61/.339	10.61/.418	12.62/.497	12.62/.497
DIM S:		5.86/.231	6.85/.270	7.36/.290	6.37/.251	8.35/.329	8.86/.349	10.86/.428	12.87/.507	12.87/.507
POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
10	17.69/0.698	45970-1115	45970-1215	45970-1315	45970-1415	45970-1515	45970-1615	45970-1715	45970-1915	
20	30.39/1.198	45970-2115	45970-2215	45970-2315	45970-2415	45970-2515	45970-2615	45970-2715	45970-2915	
30	43.09/1.698	45970-3115	45970-3215	45970-3315	45970-3415	45970-3515	45970-3615	45970-3715	45970-3915	
40	55.79/2.198	45970-4115	45970-4215	45970-4315	45970-4415	45970-4515	45970-4615	45970-4715		45970-4916
50	68.49/2.698	45970-5115	45970-5215	45970-5315	45970-5415	45970-5515	45970-5615	45970-5715		45970-5916
15	24.04/0.948	45970-6115	45970-6215	45970-6315	45970-6415	45970-6515	45970-6615	45970-6715	45970-6915	
25	36.74/1.448	45970-7115	45970-7215	45970-7315	45970-7415	45970-7515	45970-7615	45970-7715	45970-7915	
35	49.44/1.948	45970-8115	45970-8215	45970-8315	45970-8415	45970-8515	45970-8615	45970-8715	45970-8915	
45	62.14/2.448	45970-9115	45970-9215	45970-9315	45970-9415	45970-9515	45970-9615	45970-9715	45970-9915	

D

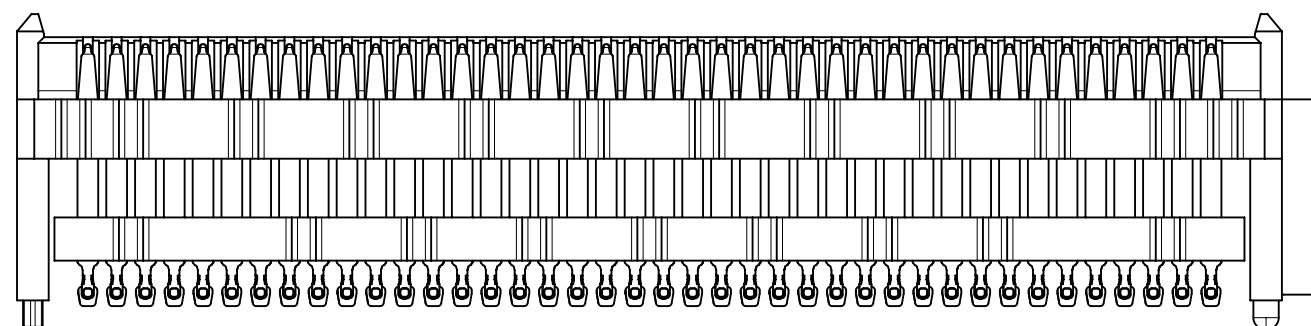
D

C

C

MATING STACK HEIGHTS (DIMENSION P)
GIVEN IN MILLIMETERS (mm) FOR REFERENCE ONLY

9.0mm PLUG WITH ALIGNER
45970-4916 SHOWN



B

B

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
DIMENSION UNITS		SCALE		CURRENT REV DESC:						
mm		3:1		EC NO: 651917 DRWN: HCGOH CHK'D: CLHOE01 APPR: SHONG						
GENERAL TOLERANCES (UNLESS SPECIFIED)				2020/12/18					SEARAY PLUG ASSEMBLY 1.27/.050 CENTERS	
ANGULAR TOL ± °				2020/12/22					PRODUCT CUSTOMER DRAWING	
4 PLACES ±				2020/12/31					DOCUMENT NUMBER	
3 PLACES ±				INITIAL REVISION:					SD-45970-001	
2 PLACES ± 0.25				DRWN: TGREGORI					DOC TYPE	
1 PLACE ± 0.38				APPR: JCOMERCI					PSD	
0 PLACES ±				2006/01/25					DOC PART	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		REVISION		
						B-SIZE		U1		
				SERIES		MATERIAL NUMBER		SHEET NUMBER		
				45970		SEE TABLE		6 OF 7		
				CUSTOMER		GENERAL MARKET				

A

A

F
E
D
C
B
A

REV	DATE	DESCRIPTION
T3	2017/03/28	MIGRATED TO ECTR / NX
	2017/06/09	ADDED RECOMMENDED PCB LAYOUT FOR 8 ROW ASSEMBLIES ON SHEET 3, UPDATED VIEWS SHEET 1, SHIFTED TABLES TO NEXT SHEETS.
T4	2018/10/03	ADD PAD LOCATION DIMENSIONS ON SHEET 2, UPDATE MATING HEIGHT TABLE ON SHEET 5, ADD VERSIONS WITH ALIGNERS ON SHEET 6
T5	2019/01/15	UPDATE 8 ROW CHART ON SHEET 6
T6	2019/05/20	ADDED RECOMMENDED PCB LAYOUT FOR 10 ROW ASSEMBLIES ON SHEET 4, SHIFTED TABLES TO NEXT SHEETS.
U	2020/10/14	REMOVED OBSOLETE PART NUMBERS
U1	2020/12/18	REVISED DRAWING TO REFLECT ACTUAL NUMBER OF EDGE NOTCHES FOR PART NO. 45970-4916 & 45970-5916.

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DIMENSION UNITS		SCALE		CURRENT REV DESC:				molex				
mm		1:1										
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 651917 DRWN: HCGOH 2020/12/18 CHK'D: CLHOE01 2020/12/22 APPR: SHONG 2020/12/31 INITIAL REVISION: DRWN: TGREGORI 2006/01/25 APPR: JCOMERCI 2006/01/30				SEARAY		PLUG ASSEMBLY 1.27/1.050 CENTERS		
ANGULAR TOL ± °								PRODUCT CUSTOMER DRAWING				
4 PLACES ±								DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
3 PLACES ±								SD-45970-001		PSD	001	U1
2 PLACES ± 0.25								MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
1 PLACE ± 0.38								SEE TABLE		GENERAL MARKET		7 OF 7
0 PLACES ±				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER			
					B-SIZE	45970						