

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

**Part Number:** [0459704311](#)  
**Status:** **Active**  
**Overview:** [searay](#)  
**Description:** 1.27mm (.050") x 1.27mm (.050") Pitch SEARAY\* Plug, 400 Circuits, 2.00mm (.078") Unmated Height, 10 Rows, Lead Free

**Documents:**

[3D Model](#) [Product Specification PS-45970-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-45970-001 \(PDF\)](#)

**Agency Certification**

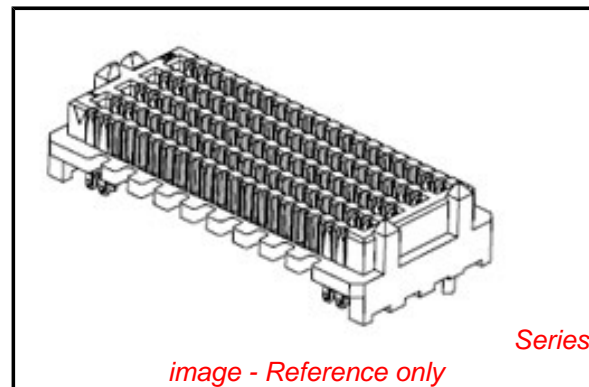
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [45970](#)  
 Application Board-to-Board  
 MolexKits Yes  
 Overview [searay](#)  
 Product Name SEARAY\*

**Physical**

Breakaway No  
 Circuits (Loaded) 400  
 Circuits (maximum) 400  
 Circuits Detail 400  
 Color - Resin Black  
 Durability (mating cycles max) 100  
 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 Copper Alloy  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 10  
 Orientation Vertical  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.75  
 Plating min: Termination (µin) 100  
 Plating min: Termination (µm) 2.5  
 Polarized to Mating Part 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](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.

**Search Parts in this Series**

[45970Series](#)

**Mates With**

[45971 SEARAY\\* Receptacle](#)

Polarized to PCB	Yes
Robotic Placement	Pick and Place Cap
Shrouded	No
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-55°C to +125°C
Termination Interface: Style	Surface Mount

### **Electrical**

Current - Maximum per Contact	1A
Voltage - Maximum	240V AC

### **Solder Process Data**

Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

### **Material Info**

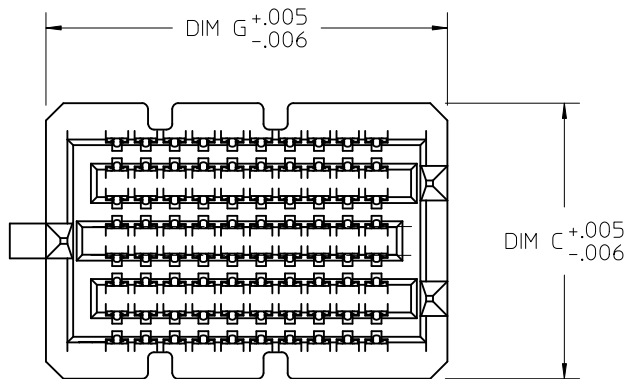
#### **Reference - Drawing Numbers**

Application Specification	AS-45970-001, AS-45970-002, AS-45970-990
Packaging Specification	PK-45970-001
Product Specification	PS-45970-001, PS-45970-002
Sales Drawing	SD-45970-001
Test Summary	TS-45970-001

\*SEARAY is a trademark of Samtec, Inc.

This document was generated on 06/08/2010

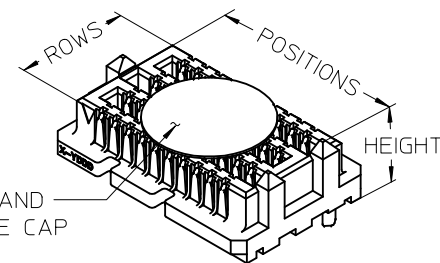
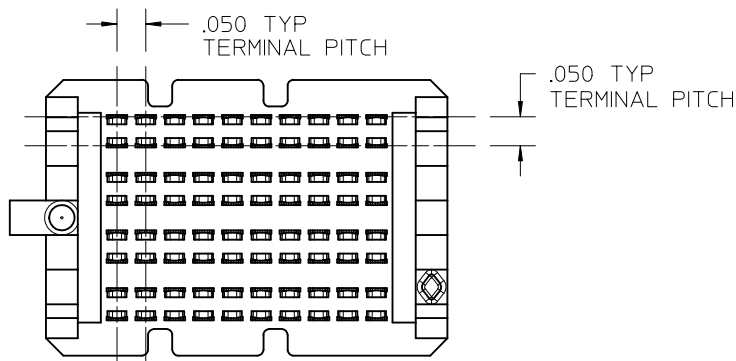
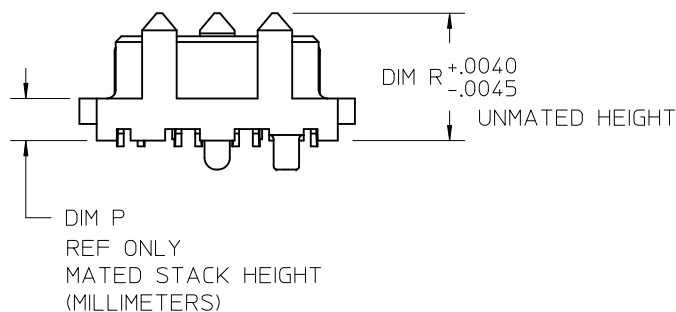
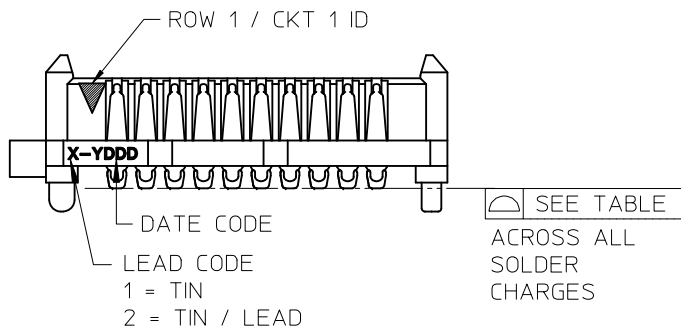
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



NOTES:

1. MATERIAL: HOUSING: LCP, UL94V-0, BLACK  
CONTACTS: COPPER ALLOY  
SOLDER CHARGE: SEE CHARTS
2. FINISH: ALL OPTIONS - SELECT GOLD IN CONTACT AREA: 30 MI MIN  
OPTIONS 2.0 & 2.5: SELECT GOLD FLASH IN TAIL, 7 MI MIN  
OPTIONS 3.0 THRU 7.0: SELECT TIN IN TAIL, 100 MI MIN  
ALL OPTIONS - OVER NICKEL
3. PRODUCT SPECIFICATION: PS-45970-001
4. PACKAGING SPECIFICATION: SEE CHART
5. MATES WITH SEARAY RECEPTACLE ASSY 45971
6. APPLICATION SPECIFICATION; AS-45970-001
7. COSMETIC SPECIFICATION: PS-45499-002 CLASS B
8. PART STATUS: CONTACT MOLEX

POSITION	
19	.006
10	.006
20	.006
30	.006
40	.006
50	.006
15	.006
25	.006
35	.009
45	.009



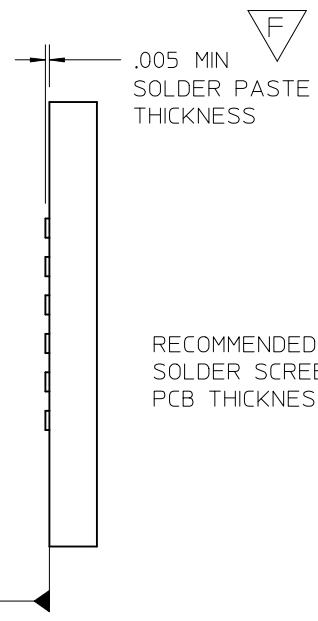
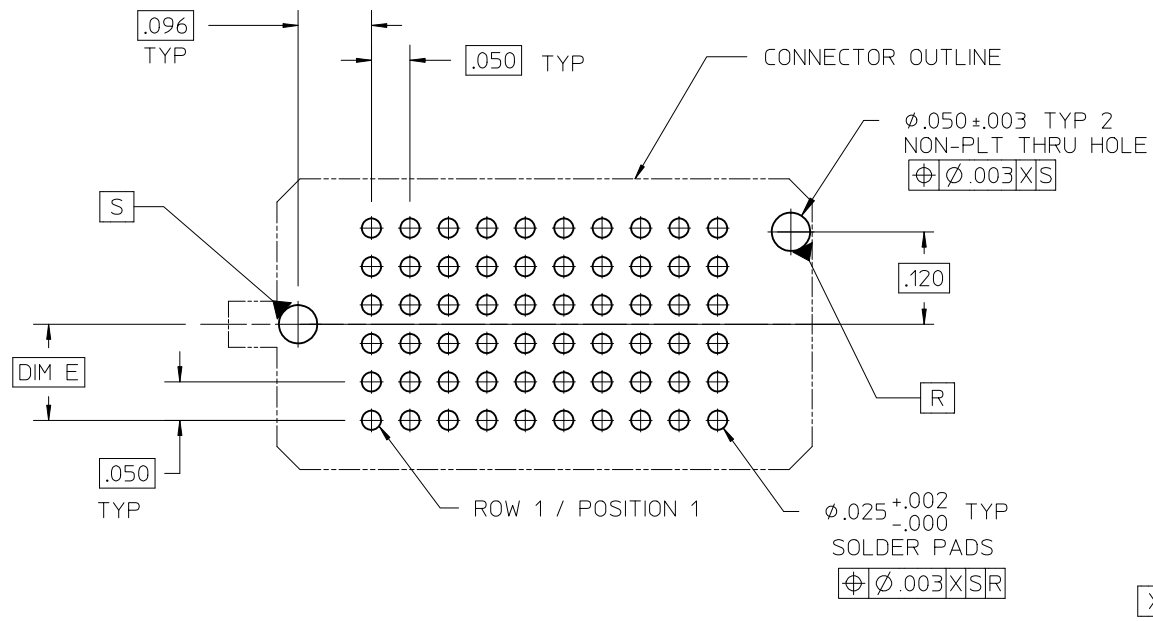
HOUSING OPTIONS  
SEE CHARTS

UPDATED NOTE 2 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CH'KD: JCOMERCI 2010/03/05 APPR: JCOMERCI 2010/03/05	DESCRIPTION
	REV
	M

GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	± .005	± .002
3 PLACES	± .005	± .010
2 PLACES	± .005	± .015
1 PLACE	± .005	± .020
ANGULAR ± .005°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE INCH ONLY	
DRAWN BY TGREGORI	DATE 2005/01/27
CHECKED BY JCOMERCI	DATE
APPROVED BY JCOMERCI	DATE 2010/03/05
MATERIAL NO. SEE CHART	

SCALE 3:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
TITLE SEARAY PLUG ASSEMBLY .050 CENTERS		
MOLEX INCORPORATED		
DOCUMENT NO. SD-45970-001	SHEET NO. 1 OF 10	

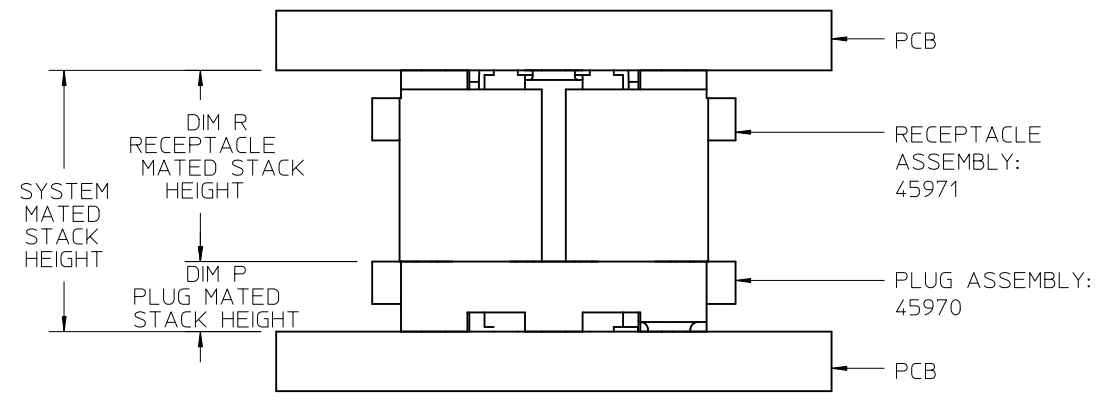


NO OF ROWS	DIM C	DIM E
6	.378	.125
8	.478	.175
10	.578	.225
12	.678	.275

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

		DIM R RECEPTACLE STACK HEIGHT				
		5.0	6.0	6.5	7.5	8.0
DIM P PLUG STACK HEIGHT	2.0	7.0	8.0	8.5	9.5	10.0
	3.0	8.0	9.0	9.5	10.5	11.0
	3.5	8.5	9.5	10.0	11.0	11.5
	2.5	7.5	8.5	9.0	10.0	10.5
	4.5	9.5	10.5	11.0	12.0	12.5
	5.0	10.0	11.0	11.5	12.5	13.0
	7.0	12.0	13.0	13.5	14.5	15.0

MATED STACK HEIGHTS  
(MILLIMETERS) REF



STACK HEIGHTS GIVEN IN METRIC FOR REF ONLY

SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CH'KD: JCOMERCI 2010/03/05 APPR: JCOMERCI 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY TGREGORI	DATE 2005/01/27	TITLE <b>SEARAY          PLUG ASSEMBLY          .050 CENTERS</b> <b>MOLEX INCORPORATED</b>		
		4 PLACES	± .005	± .010	CHECKED BY JCOMERCI	DATE			
		3 PLACES	± .005	± .010	APPROVED BY JCOMERCI	DATE 2010/03/05			
		2 PLACES	± .005	± .015					
			1 PLACE	± .005	± .015				
		ANGULAR ± .005°				DOCUMENT NO. SD-45970-001		SHEET NO. 2 OF 10	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

D	TRAY PACK PK-45971-001	DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM
		DIM R:		.221	.260	.280	.241	.319	.339	.418
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
		19	1.146	45970-0161	45970-0261	45970-0361	45970-0461	45970-0561	45970-0661	45970-0761
		10	0.696	45970-1161	45970-1261	45970-1361	45970-1461	45970-1561	45970-1661	45970-1761
		20	1.196	45970-2161	45970-2261	45970-2361	45970-2461	45970-2561	45970-2661	45970-2761
		30	1.696	45970-3161	45970-3261	45970-3361	45970-3461	45970-3561	45970-3661	45970-3761
		40	2.196	45970-4161	45970-4261	45970-4361	45970-4461	45970-4561	45970-4661	45970-4761
		50	2.696	45970-5161	45970-5261	45970-5361	45970-5461	45970-5561	45970-5661	45970-5761
		15	0.946	45970-6161	45970-6261	45970-6361	45970-6461	45970-6561	45970-6661	45970-6761
		25	1.446	45970-7161	45970-7261	45970-7361	45970-7461	45970-7561	45970-7661	45970-7761
		35	1.946	45970-8161	45970-8261	45970-8361	45970-8461	45970-8561	45970-8661	45970-8761
45	2.446	45970-9161	45970-9261	45970-9361	45970-9461	45970-9561	45970-9661	45970-9761		

C	TAPE AND REEL PACK PK-45971-002	DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM
		DIM R:		.221	.260	.280	.241	.319	.339	.418
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
		19	1.146	45970-0165	45970-0265	45970-0365	45970-0465	45970-0565	45970-0665	45970-0765
		10	0.696	45970-1165	45970-1265	45970-1365	45970-1465	45970-1565	45970-1665	45970-1765
		20	1.196	45970-2165	45970-2265	45970-2365	45970-2465	45970-2565	45970-2665	45970-2765
		30	1.696	45970-3165	45970-3265	45970-3365	45970-3465	45970-3565	45970-3665	45970-3765
		40	2.196	45970-4165	45970-4265	45970-4365	45970-4465	45970-4565	45970-4665	45970-4765
		50	2.696	45970-5165	45970-5265	45970-5365	45970-5465	45970-5565	45970-5665	45970-5765
		15	0.946	45970-6165	45970-6265	45970-6365	45970-6465	45970-6565	45970-6665	45970-6765
		25	1.446	45970-7165	45970-7265	45970-7365	45970-7465	45970-7565	45970-7665	45970-7765
		35	1.946	45970-8165	45970-8265	45970-8365	45970-8465	45970-8565	45970-8665	45970-8765
45	2.446	45970-9165	45970-9265	45970-9365	45970-9465	45970-9565	45970-9665	45970-9765		

NOTES:  
 1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS:  
 NO OF ROWS: 6  
 SOLDER CHARGE: TIN  
 PACKAGING: TRAYS AND TAPE AND REEL

SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CHKD: JCOMERCI 2010/03/05 APPR: JCOMERCI 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>INCH ONLY</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY TGREGORI	DATE 2005/01/27	TITLE <b>SEARAY          PLUG ASSEMBLY          .050 CENTERS</b>			
		4 PLACES	± ---	± ---	CHECKED BY JCOMERCI	DATE				
		3 PLACES	± ---	± .010	APPROVED BY JCOMERCI	DATE 2010/03/05				
		2 PLACES	± ---	± .015	ANGULAR ± ---°		<b>MOLEX INCORPORATED</b>		DOCUMENT NO. <b>SD-45970-001</b>	SHEET NO. <b>3 OF 10</b>
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE <b>A</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

D	TRAY PACK PK-45971-001	6		5		4		3		2		1		
		DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM				
		DIM R:		.221	.260	.280	.241	3.19	.339	.418				
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO				
		19	1.146	45970-0163	45970-0263	45970-0363	45970-0463	45970-0563	45970-0663	45970-0763				
		10	0.696	45970-1163	45970-1263	45970-1363	45970-1463	45970-1563	45970-1663	45970-1763				
		20	1.196	45970-2163	45970-2263	45970-2363	45970-2463	45970-2563	45970-2663	45970-2763				
		30	1.696	45970-3163	45970-3263	45970-3363	45970-3463	45970-3563	45970-3663	45970-3763				
		40	2.196	45970-4163	45970-4263	45970-4363	45970-4463	45970-4563	45970-4663	45970-4763				
		50	2.696	45970-5163	45970-5263	45970-5363	45970-5463	45970-5563	45970-5663	45970-5763				
		15	0.946	45970-6163	45970-6263	45970-6363	45970-6463	45970-6563	45970-6663	45970-6763				
		25	1.446	45970-7163	45970-7263	45970-7363	45970-7463	45970-7563	45970-7663	45970-7763				
35	1.946	45970-8163	45970-8263	45970-8363	45970-8463	45970-8563	45970-8663	45970-8763						
45	2.446	45970-9163	45970-9263	45970-9363	45970-9463	45970-9563	45970-9663	45970-9763						

C	TAPE AND REEL PACK PK-45971-002	6		5		4		3		2		1		
		DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM				
		DIM R:		.221	.260	.280	.241	.319	.339	.418				
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO				
		19	1.146	45970-0167	45970-0267	45970-0367	45970-0467	45970-0567	45970-0667	45970-0767				
		10	0.696	45970-1167	45970-1267	45970-1367	45970-1467	45970-1567	45970-1667	45970-1767				
		20	1.196	45970-2167	45970-2267	45970-2367	45970-2467	45970-2567	45970-2667	45970-2767				
		30	1.696	45970-3167	45970-3267	45970-3367	45970-3467	45970-3567	45970-3667	45970-3767				
		40	2.196	45970-4167	45970-4267	45970-4367	45970-4467	45970-4567	45970-4667	45970-4767				
		50	2.696	45970-5167	45970-5267	45970-5367	45970-5467	45970-5567	45970-5667	45970-5767				
		15	0.946	45970-6167	45970-6267	45970-6367	45970-6467	45970-6567	45970-6667	45970-6767				
		25	1.446	45970-7167	45970-7267	45970-7367	45970-7467	45970-7567	45970-7667	45970-7767				
35	1.946	45970-8167	45970-8267	45970-8367	45970-8467	45970-8567	45970-8667	45970-8767						
45	2.446	45970-9167	45970-9267	45970-9367	45970-9467	45970-9567	45970-9667	45970-9767						

NOTES:  
 1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS  
 ROWS: 6  
 SOLDER CHARGE: TIN / LEAD  
 PACKAGING: TRAYS AND TAPE AND REEL

A	SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CHKD: JCOMERCI 2010/03/05 APPR: JCOMERCI 2010/03/05	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>INCH ONLY</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY TGREGORI	DATE 2005/01/27	TITLE <b>SEARAY PLUG ASSEMBLY .050 CENTERS</b>			
			4 PLACES	± ---	± ---	CHECKED BY JCOMERCI	DATE				
			3 PLACES	± ---	± .010	APPROVED BY JCOMERCI					
			2 PLACES	± ---	± .015	ANGULAR ± ---°		DOCUMENT NO. <b>SD-45970-001</b>		SHEET NO. 4 OF 10	
1 PLACE	± ---	± ---	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						

6		5		4		3		2		1					
DIM P:		2.0 MM		3.0 MM		2.5 MM		4.5 MM		5.0 MM		7.0 MM			
DIM R:		.221		.260		.280		.241		.319		.339		.418	
POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO		
19	1.146	45970-0181	45970-0281	45970-0381	45970-0481	45970-0581	45970-0681	45970-0781	45970-0881	45970-0981	45970-1081	45970-1181	45970-1281		
10	0.696	45970-1181	45970-1281	45970-1381	45970-1481	45970-1581	45970-1681	45970-1781	45970-1881	45970-1981	45970-2081	45970-2181	45970-2281		
20	1.196	45970-2181	45970-2281	45970-2381	45970-2481	45970-2581	45970-2681	45970-2781	45970-2881	45970-2981	45970-3081	45970-3181	45970-3281		
30	1.696	45970-3181	45970-3281	45970-3381	45970-3481	45970-3581	45970-3681	45970-3781	45970-3881	45970-3981	45970-4081	45970-4181	45970-4281		
40	2.196	45970-4181	45970-4281	45970-4381	45970-4481	45970-4581	45970-4681	45970-4781	45970-4881	45970-4981	45970-5081	45970-5181	45970-5281		
50	2.696	45970-5181	45970-5281	45970-5381	45970-5481	45970-5581	45970-5681	45970-5781	45970-5881	45970-5981	45970-6081	45970-6181	45970-6281		
15	0.946	45970-6181	45970-6281	45970-6381	45970-6481	45970-6581	45970-6681	45970-6781	45970-6881	45970-6981	45970-7081	45970-7181	45970-7281		
25	1.446	45970-7181	45970-7281	45970-7381	45970-7481	45970-7581	45970-7681	45970-7781	45970-7881	45970-7981	45970-8081	45970-8181	45970-8281		
35	1.946	45970-8181	45970-8281	45970-8381	45970-8481	45970-8581	45970-8681	45970-8781	45970-8881	45970-8981	45970-9081	45970-9181	45970-9281		
45	2.446	45970-9181	45970-9281	45970-9381	45970-9481	45970-9581	45970-9681	45970-9781	45970-9881	45970-9981	45970-10081	45970-10181	45970-10281		

6		5		4		3		2		1					
DIM P:		2.0 MM		3.0 MM		2.5 MM		4.5 MM		5.0 MM		7.0 MM			
DIM R:		.221		.260		.280		.241		.319		.339		.418	
POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO		
19	1.146	45970-0185	45970-0285	45970-0385	45970-0485	45970-0585	45970-0685	45970-0785	45970-0885	45970-0985	45970-1085	45970-1185	45970-1285		
10	0.696	45970-1185	45970-1285	45970-1385	45970-1485	45970-1585	45970-1685	45970-1785	45970-1885	45970-1985	45970-2085	45970-2185	45970-2285		
20	1.196	45970-2185	45970-2285	45970-2385	45970-2485	45970-2585	45970-2685	45970-2785	45970-2885	45970-2985	45970-3085	45970-3185	45970-3285		
30	1.696	45970-3185	45970-3285	45970-3385	45970-3485	45970-3585	45970-3685	45970-3785	45970-3885	45970-3985	45970-4085	45970-4185	45970-4285		
40	2.196	45970-4185	45970-4285	45970-4385	45970-4485	45970-4585	45970-4685	45970-4785	45970-4885	45970-4985	45970-5085	45970-5185	45970-5285		
50	2.696	45970-5185	45970-5285	45970-5385	45970-5485	45970-5585	45970-5685	45970-5785	45970-5885	45970-5985	45970-6085	45970-6185	45970-6285		
15	0.946	45970-6185	45970-6285	45970-6385	45970-6485	45970-6585	45970-6685	45970-6785	45970-6885	45970-6985	45970-7085	45970-7185	45970-7285		
25	1.446	45970-7185	45970-7285	45970-7385	45970-7485	45970-7585	45970-7685	45970-7785	45970-7885	45970-7985	45970-8085	45970-8185	45970-8285		
35	1.946	45970-8185	45970-8285	45970-8385	45970-8485	45970-8585	45970-8685	45970-8785	45970-8885	45970-8985	45970-9085	45970-9185	45970-9285		
45	2.446	45970-9185	45970-9285	45970-9385	45970-9485	45970-9585	45970-9685	45970-9785	45970-9885	45970-9985	45970-10085	45970-10185	45970-10285		

NOTES:  
 1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS  
 ROWS: 8  
 SOLDER CHARGE: TIN  
 PACKAGING: TRAYS AND TAPE AND REEL

SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CHKD: JCOMERCI 2010/03/05 APPR: JCOMERCI 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE <b>SEARAY          PLUG ASSEMBLY          .050 CENTERS</b>  <b>MOLEX INCORPORATED</b>  DOCUMENT NO. SD-45970-001 SHEET NO. 5 OF 10			
		4 PLACES	± ---	± ---	TGREGORI	2005/01/27				
		3 PLACES	± ---	± .010	JCOMERCI					
		2 PLACES	± ---	± .015						
1 PLACE	± ---	± ---	APPROVED BY	DATE						
		ANGULAR ± ---°		JCOMERCI	2010/03/05					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				





6		5		4		3		2		1					
DIM P:		2.0 MM		3.0 MM		3.5 MM		2.5 MM		4.5 MM		5.0 MM		7.0 MM	
DIM R:		.221		.260		.280		.241		.319		.339		.418	
POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
19	1.146	45970-0111	45970-0211	45970-0311	45970-0411	45970-0511	45970-0611	45970-0711	45970-0811	45970-0911	45970-1011	45970-1111	45970-1211	45970-1311	45970-1411
10	0.696	45970-1111	45970-1211	45970-1311	45970-1411	45970-1511	45970-1611	45970-1711	45970-1811	45970-1911	45970-2011	45970-2111	45970-2211	45970-2311	45970-2411
20	1.196	45970-2111	45970-2211	45970-2311	45970-2411	45970-2511	45970-2611	45970-2711	45970-2811	45970-2911	45970-3011	45970-3111	45970-3211	45970-3311	45970-3411
30	1.696	45970-3111	45970-3211	45970-3311	45970-3411	45970-3511	45970-3611	45970-3711	45970-3811	45970-3911	45970-4011	45970-4111	45970-4211	45970-4311	45970-4411
40	2.196	45970-4111	45970-4211	45970-4311	45970-4411	45970-4511	45970-4611	45970-4711	45970-4811	45970-4911	45970-5011	45970-5111	45970-5211	45970-5311	45970-5411
50	2.696	45970-5111	45970-5211	45970-5311	45970-5411	45970-5511	45970-5611	45970-5711	45970-5811	45970-5911	45970-6011	45970-6111	45970-6211	45970-6311	45970-6411
15	0.946	45970-6111	45970-6211	45970-6311	45970-6411	45970-6511	45970-6611	45970-6711	45970-6811	45970-6911	45970-7011	45970-7111	45970-7211	45970-7311	45970-7411
25	1.446	45970-7111	45970-7211	45970-7311	45970-7411	45970-7511	45970-7611	45970-7711	45970-7811	45970-7911	45970-8011	45970-8111	45970-8211	45970-8311	45970-8411
35	1.946	45970-8111	45970-8211	45970-8311	45970-8411	45970-8511	45970-8611	45970-8711	45970-8811	45970-8911	45970-9011	45970-9111	45970-9211	45970-9311	45970-9411
45	2.446	45970-9111	45970-9211	45970-9311	45970-9411	45970-9511	45970-9611	45970-9711	45970-9811	45970-9911	45970-10011	45970-10111	45970-10211	45970-10311	45970-10411

6		5		4		3		2		1					
DIM P:		2.0 MM		3.0 MM		3.5 MM		2.5 MM		4.5 MM		5.0 MM		7.0 MM	
DIM R:		.221		.260		.280		.241		.319		.339		.418	
POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
19	1.146	45970-0115	45970-0215	45970-0315	45970-0415	45970-0515	45970-0615	45970-0715	45970-0815	45970-0915	45970-1015	45970-1115	45970-1215	45970-1315	45970-1415
10	0.696	45970-1115	45970-1215	45970-1315	45970-1415	45970-1515	45970-1615	45970-1715	45970-1815	45970-1915	45970-2015	45970-2115	45970-2215	45970-2315	45970-2415
20	1.196	45970-2115	45970-2215	45970-2315	45970-2415	45970-2515	45970-2615	45970-2715	45970-2815	45970-2915	45970-3015	45970-3115	45970-3215	45970-3315	45970-3415
30	1.696	45970-3115	45970-3215	45970-3315	45970-3415	45970-3515	45970-3615	45970-3715	45970-3815	45970-3915	45970-4015	45970-4115	45970-4215	45970-4315	45970-4415
40	2.196	45970-4115	45970-4215	45970-4315	45970-4415	45970-4515	45970-4615	45970-4715	45970-4815	45970-4915	45970-5015	45970-5115	45970-5215	45970-5315	45970-5415
50	2.696	45970-5115	45970-5215	45970-5315	45970-5415	45970-5515	45970-5615	45970-5715	45970-5815	45970-5915	45970-6015	45970-6115	45970-6215	45970-6315	45970-6415
15	0.946	45970-6115	45970-6215	45970-6315	45970-6415	45970-6515	45970-6615	45970-6715	45970-6815	45970-6915	45970-7015	45970-7115	45970-7215	45970-7315	45970-7415
25	1.446	45970-7115	45970-7215	45970-7315	45970-7415	45970-7515	45970-7615	45970-7715	45970-7815	45970-7915	45970-8015	45970-8115	45970-8215	45970-8315	45970-8415
35	1.946	45970-8115	45970-8215	45970-8315	45970-8415	45970-8515	45970-8615	45970-8715	45970-8815	45970-8915	45970-9015	45970-9115	45970-9215	45970-9315	45970-9415
45	2.446	45970-9115	45970-9215	45970-9315	45970-9415	45970-9515	45970-9615	45970-9715	45970-9815	45970-9915	45970-10015	45970-10115	45970-10215	45970-10315	45970-10415

NOTES:  
 1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS  
 ROWS: 10  
 SOLDER CHARGE: TIN  
 PACKAGING: TRAYS AND TAPE AND REEL

SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGOR I 2010/03/05 CHKD: JCOMERC I 2010/03/05 APPR: JCOMERC I 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
		4 PLACES	± ---	± ---	DRAWN BY TGREGOR I	DATE 2005/01/27	TITLE <b>SEARAY          PLUG ASSEMBLY          .050 CENTERS</b>			
		3 PLACES	± ---	± .010	CHECKED BY JCOMERC I	DATE				
		2 PLACES	± ---	± .015	APPROVED BY JCOMERC I	DATE 2010/03/05				
1 PLACE	± ---	± ---	ANGULAR ± ---°		<b>MOLEX INCORPORATED</b>		DOCUMENT NO. SD-45970-001	SHEET NO. 7 OF 10		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

D	TRAY PACK PK-45971-001	6		5		4		3		2		1		
		DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM				
		DIM R:		.221	.260	.280	.241	.319	.339	.418				
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO				
		19	1.146	45970-0113	45970-0213	45970-0313	45970-0413	45970-0513	45970-0613	45970-0713				
		10	0.696	45970-1113	45970-1213	45970-1313	45970-1413	45970-1513	45970-1613	45970-1713				
		20	1.196	45970-2113	45970-2213	45970-2313	45970-2413	45970-2513	45970-2613	45970-2713				
		30	1.696	45970-3113	45970-3213	45970-3313	45970-3413	45970-3513	45970-3613	45970-3713				
		40	2.196	45970-4113	45970-4213	45970-4313	45970-4413	45970-4513	45970-4613	45970-4713				
		50	2.696	45970-5113	45970-5213	45970-5313	45970-5413	45970-5513	45970-5613	45970-5713				
		15	0.946	45970-6113	45970-6213	45970-6313	45970-6413	45970-6513	45970-6613	45970-6713				
		25	1.446	45970-7113	45970-7213	45970-7313	45970-7413	45970-7513	45970-7613	45970-7713				
35	1.946	45970-8113	45970-8213	45970-8313	45970-8413	45970-8513	45970-8613	45970-8713						
45	2.446	45970-9113	45970-9213	45970-9313	45970-9413	45970-9513	45970-9613	45970-9713						

C	TAPE AND REEL PACK PK-45971-002	6		5		4		3		2		1		
		DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM				
		DIM R:		.221	.260	.280	.241	.319	.339	.418				
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO				
		19	1.146	45970-0117	45970-0217	45970-0317	45970-0417	45970-0517	45970-0617	45970-0717				
		10	0.696	45970-1117	45970-1217	45970-1317	45970-1417	45970-1517	45970-1617	45970-1717				
		20	1.196	45970-2117	45970-2217	45970-2317	45970-2417	45970-2517	45970-2617	45970-2717				
		30	1.696	45970-3117	45970-3217	45970-3317	45970-3417	45970-3517	45970-3617	45970-3717				
		40	2.196	45970-4117	45970-4217	45970-4317	45970-4417	45970-4517	45970-4617	45970-4717				
		50	2.696	45970-5117	45970-5217	45970-5317	45970-5417	45970-5517	45970-5617	45970-5717				
		15	0.946	45970-6117	45970-6217	45970-6317	45970-6417	45970-6517	45970-6617	45970-6717				
		25	1.446	45970-7117	45970-7217	45970-7317	45970-7417	45970-7517	45970-7617	45970-7717				
35	1.946	45970-8117	45970-8217	45970-8317	45970-8417	45970-8517	45970-8617	45970-8717						
45	2.446	45970-9117	45970-9217	45970-9317	45970-9417	45970-9517	45970-9617	45970-9717						

NOTES:  
1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS  
ROWS: 10  
SOLDER CHARGE: TIN / LEAD  
PACKAGING: TRAYS AND TAPE AND REEL

A	SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGOR I 2010/03/05 CHKD: JCOMERC I 2010/03/05 APPR: JCOMERC I 2010/03/05	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>INCH ONLY</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION			
				mm	INCH	DRAWN BY TGREGOR I	DATE 2005/01/27	TITLE <b>SEARAY PLUG ASSEMBLY .050 CENTERS</b>				
			4 PLACES	± ---	± ---	CHECKED BY JCOMERC I	DATE					
			3 PLACES	± ---	± .010	APPROVED BY JCOMERC I	DATE 2010/03/05					
			2 PLACES	± ---	± .015	MOLEX MOLEX INCORPORATED						
1 PLACE	± ---	± ---	ANGULAR ± ---°		DOCUMENT NO. <b>SD-45970-001</b>	SHEET NO. <b>8 OF 10</b>						
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE <b>A</b>		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							



D	TRAY PACK PK-45971-001	DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM
		DIM R:		.221	.260	.280	.241	.319	.339	.418
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
		19	1.146	45970-0123	45970-0223	45970-0323	45970-0423	45970-0523	45970-0623	45970-0723
		10	0.696	45970-1123	45970-1223	45970-1323	45970-1423	45970-1523	45970-1623	45970-1723
		20	1.196	45970-2123	45970-2223	45970-2323	45970-2423	45970-2523	45970-2623	45970-2723
		30	1.696	45970-3123	45970-3223	45970-3323	45970-3423	45970-3523	45970-3623	45970-3723
		40	2.196	45970-4123	45970-4223	45970-4323	45970-4423	45970-4523	45970-4623	45970-4723
		50	2.696	45970-5123	45970-5223	45970-5323	45970-5423	45970-5523	45970-5623	45970-5723
		15	0.946	45970-6123	45970-6223	45970-6323	45970-6423	45970-6523	45970-6623	45970-6723
		25	1.446	45970-7123	45970-7223	45970-7323	45970-7423	45970-7523	45970-7623	45970-7723
		35	1.946	45970-8123	45970-8223	45970-8323	45970-8423	45970-8523	45970-8623	45970-8723
45	2.446	45970-9123	45970-9223	45970-9323	45970-9423	45970-9523	45970-9623	45970-9723		

C	TAPE AND REEL PACK PK-45971-002	DIM P:		2.0 MM	3.0 MM	3.5 MM	2.5 MM	4.5 MM	5.0 MM	7.0 MM
		DIM R:		.221	.260	.280	.241	.319	.339	.418
		POSITION	DIM G	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
		19	1.146	45970-0127	45970-0227	45970-0327	45970-0427	45970-0527	45970-0627	45970-0727
		10	0.696	45970-1127	45970-1227	45970-1327	45970-1427	45970-1527	45970-1627	45970-1727
		20	1.196	45970-2127	45970-2227	45970-2327	45970-2427	45970-2527	45970-2627	45970-2727
		30	1.696	45970-3127	45970-3227	45970-3327	45970-3427	45970-3527	45970-3627	45970-3727
		40	2.196	45970-4127	45970-4227	45970-4327	45970-4427	45970-4527	45970-4627	45970-4727
		50	2.696	45970-5127	45970-5227	45970-5327	45970-5427	45970-5527	45970-5627	45970-5727
		15	0.946	45970-6127	45970-6227	45970-6327	45970-6427	45970-6527	45970-6627	45970-6727
		25	1.446	45970-7127	45970-7227	45970-7327	45970-7427	45970-7527	45970-7627	45970-7727
		35	1.946	45970-8127	45970-8227	45970-8327	45970-8427	45970-8527	45970-8627	45970-8727
45	2.446	45970-9127	45970-9227	45970-9327	45970-9427	45970-9527	45970-9627	45970-9727		

NOTES:  
 1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS  
 ROWS: 12  
 SOLDER CHARGE: TIN / LEAD  
 PACKAGING: TRAYS AND TAPE AND REEL

SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGOR 2010/03/05 CHKD: JCOMERC 2010/03/05 APPR: JCOMERC 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>INCH ONLY</b>		SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY TGREGOR I	DATE 2005/01/27	TITLE <b>SEARAY          PLUG ASSEMBLY          .050 CENTERS</b>			
		4 PLACES	± ---	± ---	CHECKED BY JCOMERC I	DATE				
		3 PLACES	± ---	± .010	APPROVED BY JCOMERC I	DATE 2010/03/05				
		2 PLACES	± ---	± .015	ANGULAR ± ---°		<b>MOLEX INCORPORATED</b>		DOCUMENT NO. <b>SD-45970-001</b>	SHEET NO. <b>10 OF 10</b>
1 PLACE	± ---	± ---	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					