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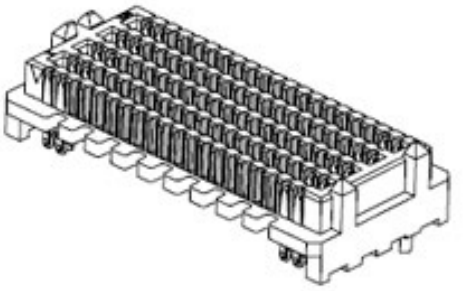
Part Number: 0459702115
Status: Active
Overview: searay
Description: 1.27mm (.050") x 1.27mm (.050") Pitch SEARAY* Plug, 200 Circuits, 2.00mm (.078") Unmated Height, 10 Rows, Lead Free



Series image - Reference only

Documents:

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

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	45970
Application	Board-to-Board
Overview	searay
Product Name	SEARAY*

Physical

Breakaway	No
Circuits (Loaded)	200
Circuits (maximum)	200
Circuits Detail	200
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	Embossed Tape on Reel
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
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
45970Series

Mates With
45971 SEARAY* Receptacle

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	2.7A
Voltage - Maximum	240V AC

Solder Process Data

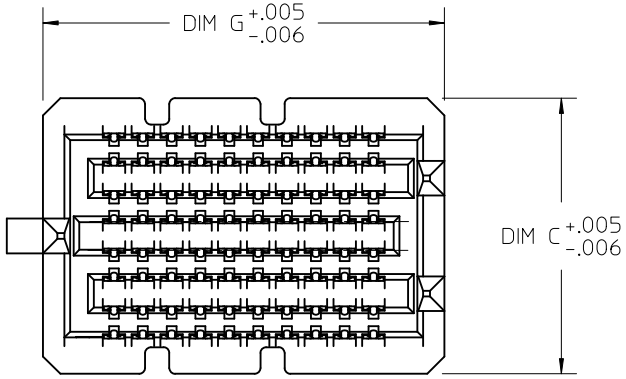
Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

Material Info

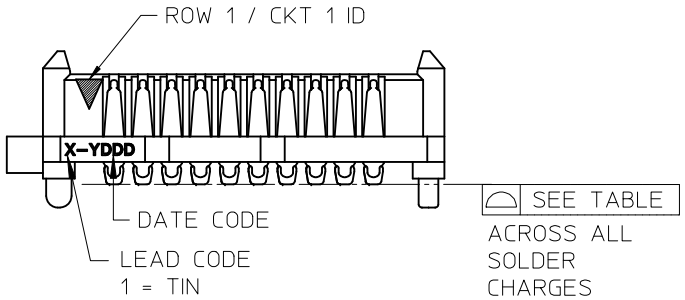
Reference - Drawing Numbers

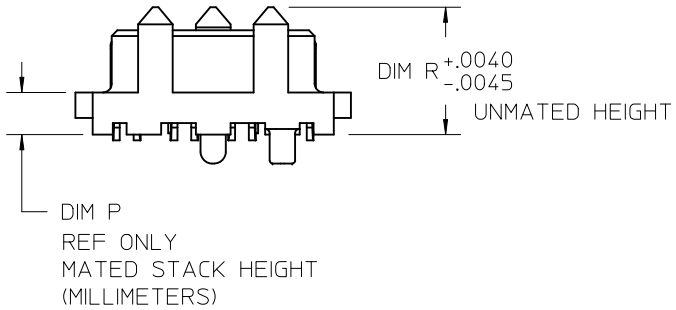
Application Specification	AS-45970-002, AS-45970-990
Packaging Specification	PK-45970-001, PK-45970-002
Product Specification	PS-45970-001, PS-45970-002
Sales Drawing	SD-45970-001
Test Summary	TS-45970-001

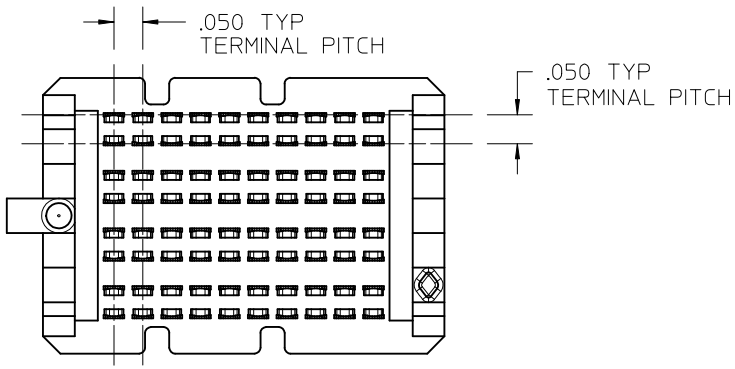
*SEARAY is a trademark of Samtec, Inc.



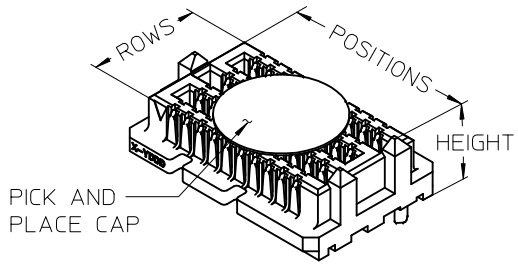
POSITION	⌓
19	.006
10	.006
20	.006
30	.006
40	.006
50	.006
15	.006
25	.006
35	.009
45	.009







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



HOUSING OPTIONS
SEE CHARTS

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

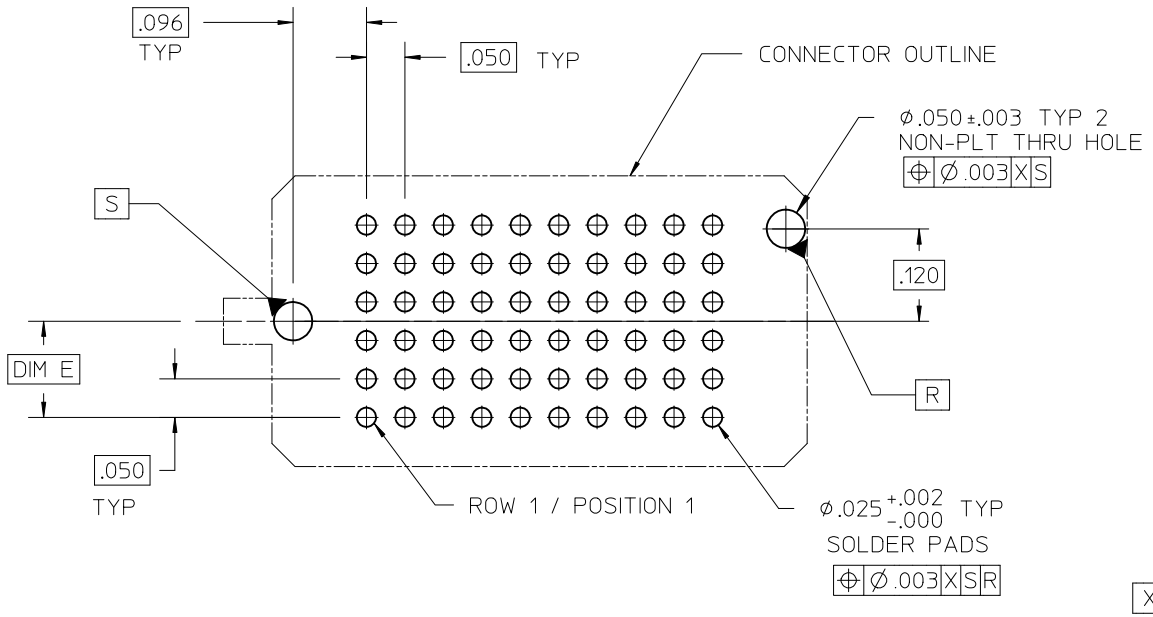
GENERAL TOLERANCES (UNLESS SPECIFIED)

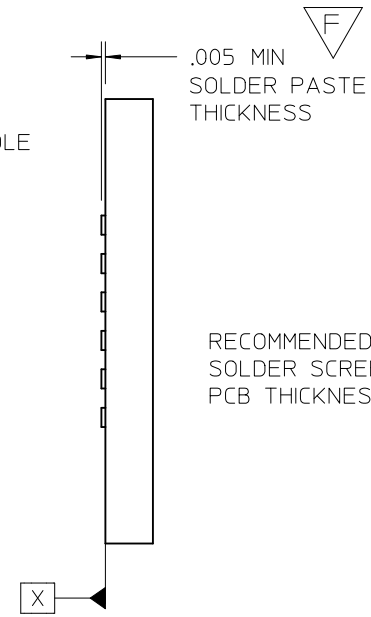
	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY	SCALE: 3:1	DESIGN UNITS: INCH	THIRD ANGLE PROJECTION
DRAWN BY: TGREGORI	DATE: 2005/01/27	TITLE: SEARAY PLUG ASSEMBLY .050 CENTERS	
CHECKED BY: JCOMERCI	DATE:		
APPROVED BY: JCOMERCI	DATE: 2010/03/05	MOLEX INCORPORATED	
MATERIAL NO.: SEE CHART	DOCUMENT NO.: SD-45970-001	SHEET NO.: 1 OF 10	

SIZE A
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



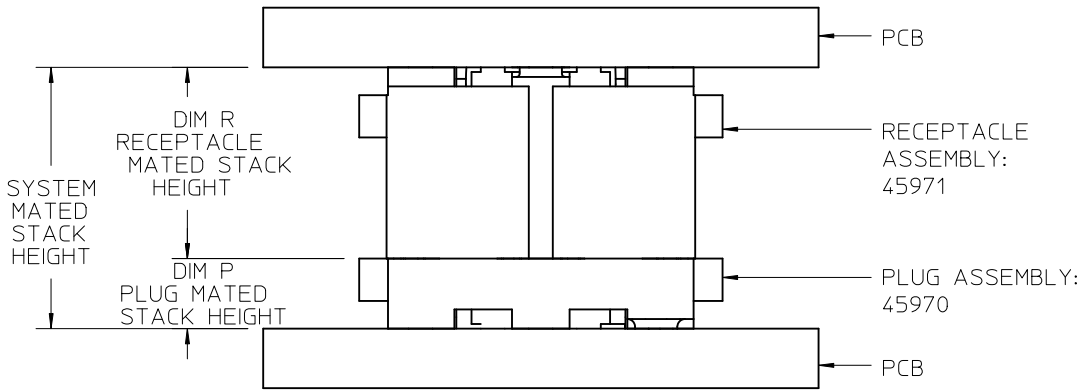


NO OF ROWS	DIM C	DIM E
6	.378	.125
8	.478	.175
10	.578	.225
12	.678	.275

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

DIM P PLUG STACK HEIGHT (MM)	DIM R RECEPTACLE STACK HEIGHT 5.0	6.0	6.5	7.5	8.0
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
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 2 OF 10

SIZE A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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

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 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 3 OF 10

SIZE A

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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	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

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	45970-0167	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

SEE SHEET 1
EC NO: UCP2010-2270 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 4 OF 10

SIZE A

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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	45970-0181	45970-0281	45970-0381	45970-0481	45970-0581	45970-0681	45970-0781
10	0.696	45970-1181	45970-1281	45970-1381	45970-1481	45970-1581	45970-1681	45970-1781
20	1.196	45970-2181	45970-2281	45970-2381	45970-2481	45970-2581	45970-2681	45970-2781
30	1.696	45970-3181	45970-3281	45970-3381	45970-3481	45970-3581	45970-3681	45970-3781
40	2.196	45970-4181	45970-4281	45970-4381	45970-4481	45970-4581	45970-4681	45970-4781
50	2.696	45970-5181	45970-5281	45970-5381	45970-5481	45970-5581	45970-5681	45970-5781
15	0.946	45970-6181	45970-6281	45970-6381	45970-6481	45970-6581	45970-6681	45970-6781
25	1.446	45970-7181	45970-7281	45970-7381	45970-7481	45970-7581	45970-7681	45970-7781
35	1.946	45970-8181	45970-8281	45970-8381	45970-8481	45970-8581	45970-8681	45970-8781
45	2.446	45970-9181	45970-9281	45970-9381	45970-9481	45970-9581	45970-9681	45970-9781

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	45970-0185	45970-0285	45970-0385	45970-0485	45970-0585	45970-0685	45970-0785
10	0.696	45970-1185	45970-1285	45970-1385	45970-1485	45970-1585	45970-1685	45970-1785
20	1.196	45970-2185	45970-2285	45970-2385	45970-2485	45970-2585	45970-2685	45970-2785
30	1.696	45970-3185	45970-3285	45970-3385	45970-3485	45970-3585	45970-3685	45970-3785
40	2.196	45970-4185	45970-4285	45970-4385	45970-4485	45970-4585	45970-4685	45970-4785
50	2.696	45970-5185	45970-5285	45970-5385	45970-5485	45970-5585	45970-5685	45970-5785
15	0.946	45970-6185	45970-6285	45970-6385	45970-6485	45970-6585	45970-6685	45970-6785
25	1.446	45970-7185	45970-7285	45970-7385	45970-7485	45970-7585	45970-7685	45970-7785
35	1.946	45970-8185	45970-8285	45970-8385	45970-8485	45970-8585	45970-8685	45970-8785
45	2.446	45970-9185	45970-9285	45970-9385	45970-9485	45970-9585	45970-9685	45970-9785

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 2010/03/05
DRWN: TGREGORI 2010/03/05
CH'KD: JCOMERCI 2010/03/05
APPR: JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---

ANGULAR ±---°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 5 OF 10

SIZE A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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	45970-0183	45970-0283	45970-0383	45970-0483	45970-0583	45970-0683	45970-0783
10	0.696	45970-1183	45970-1283	45970-1383	45970-1483	45970-1583	45970-1683	45970-1783
20	1.196	45970-2183	45970-2283	45970-2383	45970-2483	45970-2583	45970-2683	45970-2783
30	1.696	45970-3183	45970-3283	45970-3383	45970-3483	45970-3583	45970-3683	45970-3783
40	2.196	45970-4183	45970-4283	45970-4383	45970-4483	45970-4583	45970-4683	45970-4783
50	2.696	45970-5183	45970-5283	45970-5383	45970-5483	45970-5583	45970-5683	45970-5783
15	0.446	45970-6183	45970-6283	45970-6383	45970-6483	45970-6583	45970-6683	45970-6783
25	0.946	45970-7183	45970-7283	45970-7383	45970-7483	45970-7583	45970-7683	45970-7783
35	1.446	45970-8183	45970-8283	45970-8383	45970-8483	45970-8583	45970-8683	45970-8783
45	1.946	45970-9183	45970-9283	45970-9383	45970-9483	45970-9583	45970-9683	45970-9783

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	45970-0187	45970-0287	45970-0387	45970-0487	45970-0587	45970-0687	45970-0787
10	0.696	45970-1187	45970-1287	45970-1387	45970-1487	45970-1587	45970-1687	45970-1787
20	1.196	45970-2187	45970-2287	45970-2387	45970-2487	45970-2587	45970-2687	45970-2787
30	1.696	45970-3187	45970-3287	45970-3387	45970-3487	45970-3587	45970-3687	45970-3787
40	2.196	45970-4187	45970-4287	45970-4387	45970-4487	45970-4587	45970-4687	45970-4787
50	2.696	45970-5187	45970-5287	45970-5387	45970-5487	45970-5587	45970-5687	45970-5787
15	0.946	45970-6187	45970-6287	45970-6387	45970-6487	45970-6587	45970-6687	45970-6787
25	1.446	45970-7187	45970-7287	45970-7387	45970-7487	45970-7587	45970-7687	45970-7787
35	1.946	45970-8187	45970-8287	45970-8387	45970-8487	45970-8587	45970-8687	45970-8787
45	2.446	45970-9187	45970-9287	45970-9387	45970-9487	45970-9587	45970-9687	45970-9787

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

SEE SHEET 1
EC NO: UCP2010-2270 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY	TGREGORI	DATE 2005/01/27
CHECKED BY	JCOMERCI	DATE
APPROVED BY	JCOMERCI	DATE 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 6 OF 10

SIZE A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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	45970-0111	45970-0211	45970-0311	45970-0411	45970-0511	45970-0611	45970-0711
10	0.696	45970-1111	45970-1211	45970-1311	45970-1411	45970-1511	45970-1611	45970-1711
20	1.196	45970-2111	45970-2211	45970-2311	45970-2411	45970-2511	45970-2611	45970-2711
30	1.696	45970-3111	45970-3211	45970-3311	45970-3411	45970-3511	45970-3611	45970-3711
40	2.196	45970-4111	45970-4211	45970-4311	45970-4411	45970-4511	45970-4611	45970-4711
50	2.696	45970-5111	45970-5211	45970-5311	45970-5411	45970-5511	45970-5611	45970-5711
15	0.946	45970-6111	45970-6211	45970-6311	45970-6411	45970-6511	45970-6611	45970-6711
25	1.446	45970-7111	45970-7211	45970-7311	45970-7411	45970-7511	45970-7611	45970-7711
35	1.946	45970-8111	45970-8211	45970-8311	45970-8411	45970-8511	45970-8611	45970-8711
45	2.446	45970-9111	45970-9211	45970-9311	45970-9411	45970-9511	45970-9611	45970-9711

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	45970-0115	45970-0215	45970-0315	45970-0415	45970-0515	45970-0615	45970-0715
10	0.696	45970-1115	45970-1215	45970-1315	45970-1415	45970-1515	45970-1615	45970-1715
20	1.196	45970-2115	45970-2215	45970-2315	45970-2415	45970-2515	45970-2615	45970-2715
30	1.696	45970-3115	45970-3215	45970-3315	45970-3415	45970-3515	45970-3615	45970-3715
40	2.196	45970-4115	45970-4215	45970-4315	45970-4415	45970-4515	45970-4615	45970-4715
50	2.696	45970-5115	45970-5215	45970-5315	45970-5415	45970-5515	45970-5615	45970-5715
15	0.946	45970-6115	45970-6215	45970-6315	45970-6415	45970-6515	45970-6615	45970-6715
25	1.446	45970-7115	45970-7215	45970-7315	45970-7415	45970-7515	45970-7615	45970-7715
35	1.946	45970-8115	45970-8215	45970-8315	45970-8415	45970-8515	45970-8615	45970-8715
45	2.446	45970-9115	45970-9215	45970-9315	45970-9415	45970-9515	45970-9615	45970-9715

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 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 7 OF 10

SIZE A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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	45970-0113	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

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	45970-0117	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

SEE SHEET 1
EC NO: UCP2010-2270 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 8 OF 10

SIZE A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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	45970-0121	45970-0221	45970-0321	45970-0421	45970-0521	45970-0621	45970-0721
10	0.696	45970-1121	45970-1221	45970-1321	45970-1421	45970-1521	45970-1621	45970-1721
20	1.196	45970-2121	45970-2221	45970-2321	45970-2421	45970-2521	45970-2621	45970-2721
30	1.696	45970-3121	45970-3221	45970-3321	45970-3421	45970-3521	45970-3621	45970-3721
40	2.196	45970-4121	45970-4221	45970-4321	45970-4421	45970-4521	45970-4621	45970-4721
50	2.696	45970-5121	45970-5221	45970-5321	45970-5421	45970-5521	45970-5621	45970-5721
15	0.946	45970-6121	45970-6221	45970-6321	45970-6421	45970-6521	45970-6621	45970-6721
25	1.446	45970-7121	45970-7221	45970-7321	45970-7421	45970-7521	45970-7621	45970-7721
35	1.946	45970-8121	45970-8221	45970-8321	45970-8421	45970-8521	45970-8621	45970-8721
45	2.446	45970-9121	45970-9221	45970-9321	45970-9421	45970-9521	45970-9621	45970-9721

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	45970-0125	45970-0225	45970-0325	45970-0425	45970-0525	45970-0625	45970-0725
10	0.696	45970-1125	45970-1225	45970-1325	45970-1425	45970-1525	45970-1625	45970-1725
20	1.196	45970-2125	45970-2225	45970-2325	45970-2425	45970-2525	45970-2625	45970-2725
30	1.696	45970-3125	45970-3225	45970-3325	45970-3425	45970-3525	45970-3625	45970-3725
40	2.196	45970-4125	45970-4225	45970-4325	45970-4425	45970-4525	45970-4625	45970-4725
50	2.696	45970-5125	45970-5225	45970-5325	45970-5425	45970-5525	45970-5625	45970-5725
15	0.946	45970-6125	45970-6225	45970-6325	45970-6425	45970-6525	45970-6625	45970-6725
25	1.446	45970-7125	45970-7225	45970-7325	45970-7425	45970-7525	45970-7625	45970-7725
35	1.946	45970-8125	45970-8225	45970-8325	45970-8425	45970-8525	45970-8625	45970-8725
45	2.446	45970-9125	45970-9225	45970-9325	45970-9425	45970-9525	45970-9625	45970-9725

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

SEE SHEET 1
EC NO: UCP2010-2270 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 9 OF 10

SIZE A

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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

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 2010/03/05
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2010/03/05
APPR:JCOMERCI 2010/03/05
DESCRIPTION
M
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .010
2 PLACES	± ---	± .015
1 PLACE	± ---	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: INCH ONLY
SCALE: 4:1
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: TGREGORI DATE: 2005/01/27
CHECKED BY: JCOMERCI DATE:
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE
SEARAY
PLUG ASSEMBLY
.050 CENTERS

MOLEX INCORPORATED

DOCUMENT NO. SD-45970-001
SHEET NO. 10 OF 10

SIZE A

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