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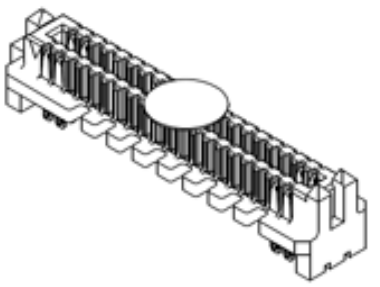
This document was generated on 03/24/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: 0465562545

Status: Active

Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 80 Circuits, 4.50mm (.196") Unmated Height, 4 Rows, With Pegs, Solder Charge™ Lead-free



Series image - Reference only

Documents:

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

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	46556
Application	Board-to-Board
Product Name	SEARAY*

Physical

Breakaway	No
Circuits (Loaded)	80
Circuits (maximum)	80
Circuits Detail	80
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	None
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	4
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
Polarized to Mating Part	Yes
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

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
46556Series

Mates With
46557 SEARAY* Slim Receptacles

Electrical

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

Solder Process Data

Duration at Max. Process Temperature (seconds)	20
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

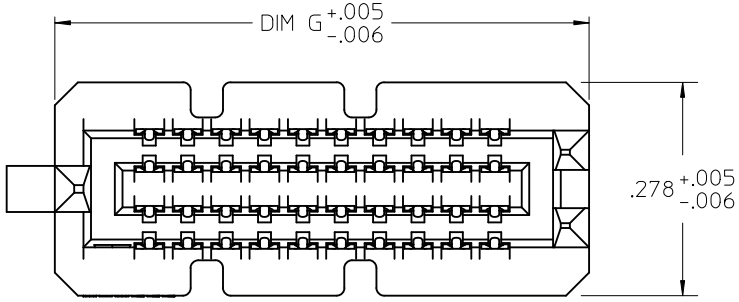
Reference - Drawing Numbers

Product Specification	PS-45970-001
Sales Drawing	SD-46556-001

*SEARAY is a trademark of Samtec, Inc.

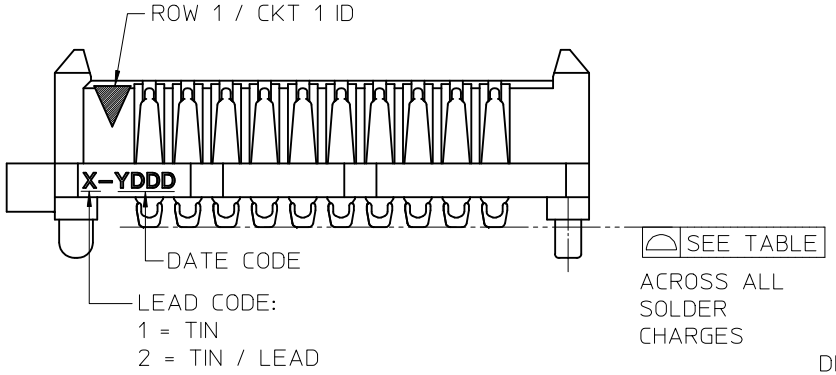
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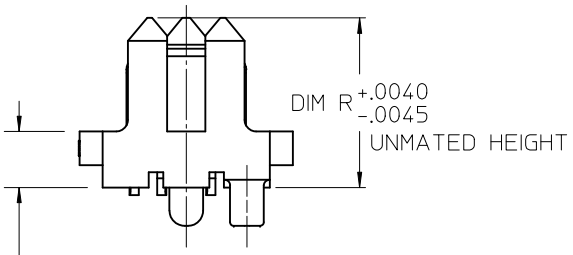
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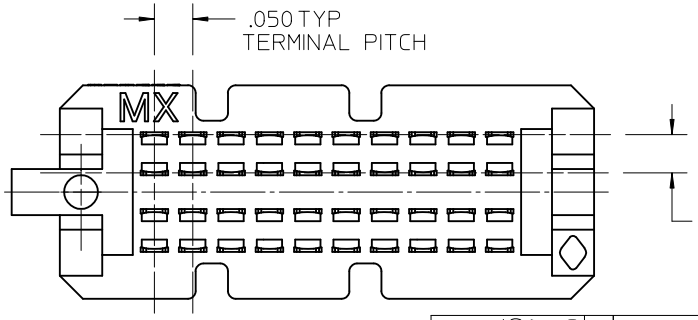
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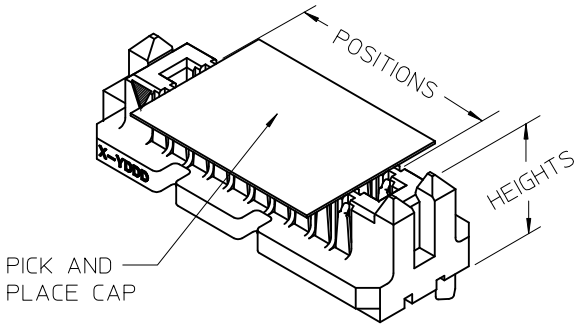
1. MATERIALS: HOUSING: LCP, UL94V-0, BLACK
   CONTACTS: COPPER ALLOY
   SOLDER CHARGE: SEE CHART
2. FINISH: ALL OPTIONS - SELECT GOLD IN CONTACT AREA: 30 MI MIN
   OPTIONS 2.0 & 2.5: SELECT GOLD FLASH IN TAIL, 7 MI MIN
   OPTIONS 3.0 THRU 7.0: SELECT TIN IN TAIL, 100 MI MIN
   ALL OPTIONS - OVER NICKEL
3. PRODUCT SPECIFICATION: PS-45970-001
4. PACKAGING SPECIFICATION: PK-45970-002
5. MATES WITH SEARAY RECPT ASSEMBLY 46557
6. APPLICATION SPECIFICATION: AS-45970-001
7. COSMETIC SPECIFICATION: PS-45499-002 CLASS B
8. PART STATUS: CONTACT MOLEX





DIM P
REF ONLY
MATED STACK
HEIGHT
(MILLIMETERS)





POSITIONS	DIM G	⌓
10	.696	.006
15	.946	.006
20	1.196	.006
25	1.446	.006
30	1.696	.006
35	1.946	.006
40	2.196	.006
45	2.446	.009
50	2.696	.009

REV	DESCRIPTION	
	UPDATED NOTE 2	
	EC NO: UCP2010-2270	
	DRWN:TGREGORI	2010/03/05
	CH'KD:JCOMERCI	2007/05/17
	APPR:JCOMERCI	2010/03/05

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .005
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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

DRAWN BY	TGREGORI	DATE 2007/05/17
CHECKED BY	JCOMERCI	DATE 2007/05/17
APPROVED BY	JCOMERCI	DATE 2010/03/05

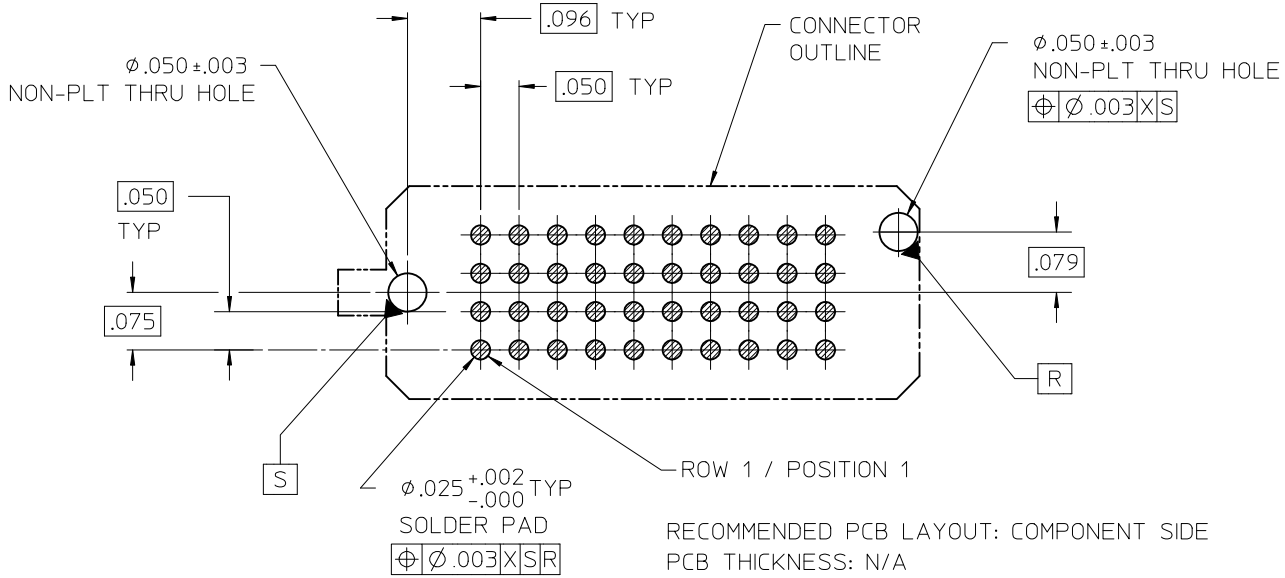
TITLE: SEARAY SLIM PLUG ASSEMBLY .050 PITCH

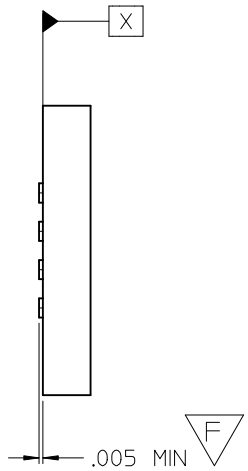
MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-46556-001
SHEET NO.: 1 OF 4

SIZE A

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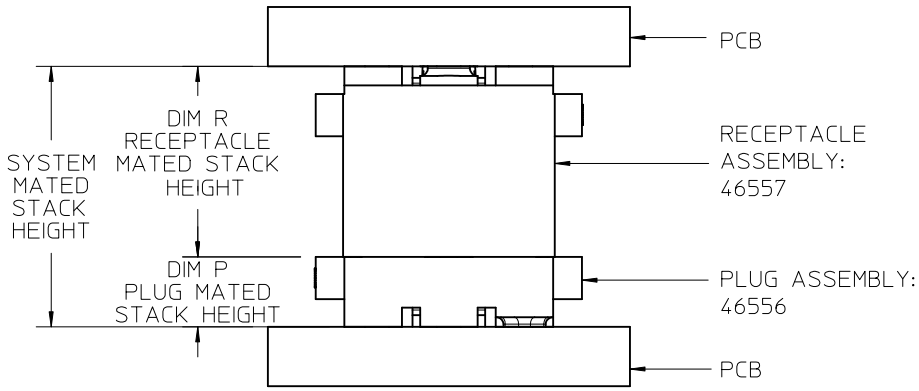




RECOMMENDED PCB LAYOUT: COMPONENT SIDE
PCB THICKNESS: N/A
SOLDER SCREEN APERTURE: .035 F

DIM P PLUG STACK HEIGHT	DIM R RECEPTACLE STACK HEIGHT				
MM	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

STACK HEIGHTS GIVEN IN MM FOR REF ONLY



SEE SHEET 1
EC NO: UCP2010-2270
DRWN:TGREGORI 2010/03/05
CH'KD:JCOMERCI 2007/05/17
APPR:JCOMERCI 2010/03/05
DESCRIPTION
REV
I

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .005
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
ANGULAR ±1/2°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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

DRAWN BY: TGREGORI DATE: 2007/05/17
CHECKED BY: JCOMERCI DATE: 2007/05/17
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE: SEARAY SLIM PLUG ASSEMBLY .050 PITCH

MOLEX INCORPORATED

MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-46556-001
SHEET NO.: 2 OF 4

SIZE A

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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: HOUSING HEIGHT:	.221	.260	.280	.241	.319	.339	.418
POSITIONS	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
10	46556-1145	46556-1245	46556-1345	46556-1445	46556-1545	46556-1645	46556-1745
20	46556-2145	46556-2245	46556-2345	46556-2445	46556-2545	46556-2645	46556-2745
30	46556-3145	46556-3245	46556-3345	46556-3445	46556-3545	46556-3645	46556-3745
40	46556-4145	46556-4245	46556-4345	46556-4445	46556-4545	46556-4645	46556-4745
50	46556-5145	46556-5245	46556-5345	46556-5445	46556-5545	46556-5645	46556-5745
15	46556-6145	46556-6245	46556-6345	46556-6445	46556-6545	46556-6645	46556-6745
25	46556-7145	46556-7245	46556-7345	46556-7445	46556-7545	46556-7645	46556-7745
35	46556-8145	46556-8245	46556-8345	46556-8445	46556-8545	46556-8645	46556-8745
45	46556-9145	46556-9245	46556-9345	46556-9445	46556-9545	46556-9645	46556-974

NOTES:
1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS
   SOLDER CHARGE: TIN

SEE SHEET 1
EC NO: UCP2010-2270 2010/03/05
DRWN:TGREGORI 2007/05/17
CH'KD:JCOMERCI 2007/05/17
APPR:JCOMERCI 2010/03/05
DESCRIPTION
REV
I

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± .005
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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

DRAWN BY: TGREGORI DATE: 2007/05/17
CHECKED BY: JCOMERCI DATE: 2007/05/17
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE: SEARAY SLIM PLUG ASSEMBLY .050 PITCH

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MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-46556-001
SHEET NO.: 3 OF 4

SIZE: A

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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: HOUSING HEIGHT:	.221	.260	.280	.241	.319	.339	.418
POSITIONS	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
10	46556-1147	46556-1247	46556-1347	46556-1447	46556-1547	46556-1647	46556-1747
20	46556-2147	46556-2247	46556-2347	46556-2447	46556-2547	46556-2647	46556-2747
30	46556-3147	46556-3247	46556-3347	46556-3447	46556-3547	46556-3647	46556-3747
40	46556-4147	46556-4247	46556-4347	46556-4447	46556-4547	46556-4647	46556-4747
50	46556-5147	46556-5247	46556-5347	46556-5447	46556-5547	46556-5647	46556-5747
15	46556-6147	46556-6247	46556-6347	46556-6447	46556-6547	46556-6647	46556-6747
25	46556-7147	46556-7247	46556-7347	46556-7447	46556-7547	46556-7647	46556-7747
35	46556-8147	46556-8247	46556-8347	46556-8447	46556-8547	46556-8647	46556-8747
45	46556-9147	46556-9247	46556-9347	46556-9447	46556-9547	46556-9647	46556-9747

NOTES:
1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS
   SOLDER CHARGE: TIN / LEAD

SEE SHEET 1
EC NO: UCP2010-2270 2010/03/05
DRWN:TGREGORI 2007/05/17
CH'KD:JCOMERCI 2007/05/17
APPR:JCOMERCI 2010/03/05
DESCRIPTION
REV
I

GENERAL TOLERANCES (UNLESS SPECIFIED)

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3 PLACES	± ---	± .005
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---

ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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

DRAWN BY: TGREGORI DATE: 2007/05/17
CHECKED BY: JCOMERCI DATE: 2007/05/17
APPROVED BY: JCOMERCI DATE: 2010/03/05

TITLE: SEARAY SLIM PLUG ASSEMBLY .050 PITCH

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MATERIAL NO.: SEE CHART
DOCUMENT NO.: SD-46556-001
SHEET NO.: 4 OF 4

SIZE: A

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