

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0465572145](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Receptacle, 80 Circuits, 5.00mm (.196") Unmated Height, 4 Rows, With Pegs, Solder Charge™ Lead Free

Documents:

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

Agency Certification

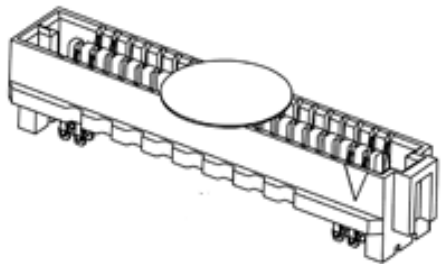
CSA	LR19980
UL	E29179

General

Product Family	PCB Receptacles
Series	46557
Application	Board-to-Board
MolexKits	Yes
Product Name	SEARAY*

Physical

Circuits (Loaded)	80
Circuits (maximum)	80
Circuits Detail	80
Color - Resin	Black
Durability (mating cycles max)	100
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	No
Material - Metal	Copper Alloy
Material - Plating Mating	Gold, Nickel
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	4
Orientation	Vertical
PC Tail Length (in)	0.086 In
PC Tail Length (mm)	2.18 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.57 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
Robotic Placement	Pick and Place Cap
Stackable	No



Series

image - Reference only

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

[46557Series](#)

Mates With

[46556](#) Searay* Slim Plug Connector

Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-55°C to +125°C
Termination Interface: Style	Through Hole

Electrical

Current - Maximum per Contact	1A
Grounding to PCB	No
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

Application Specification	AS-45970-001, AS-45970-002, AS-45970-990
Packaging Specification	PK-45971-002
Product Specification	PS-45970-001
Sales Drawing	SD-46557-001
Test Summary	TS-45970-001

*SEARAY is a trademark of Samtec, Inc.

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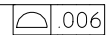
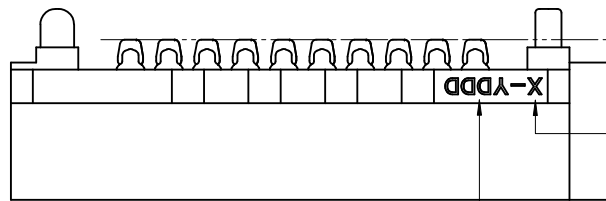
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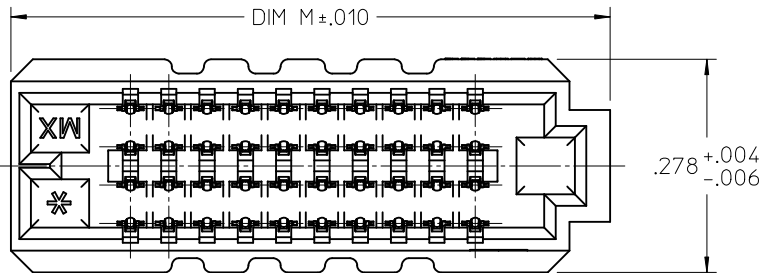
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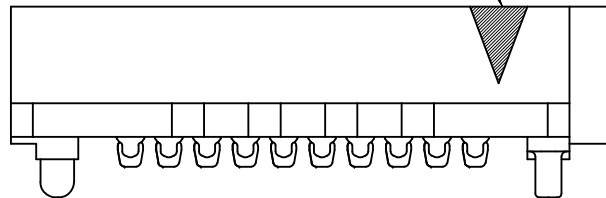
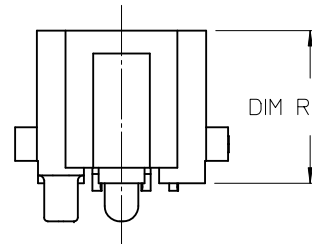
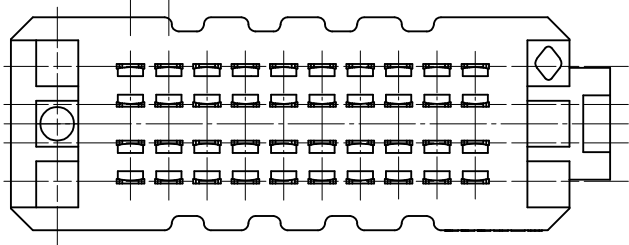
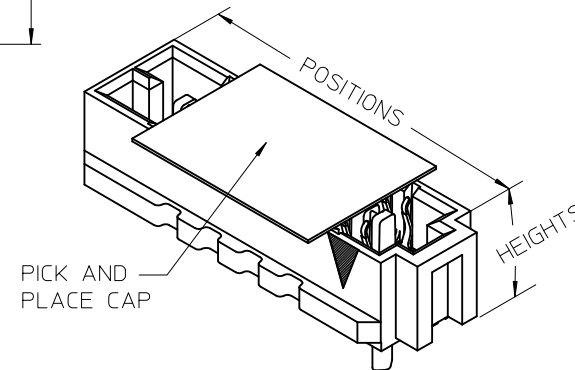
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ACROSS ALL
SOLDER CHARGESLEAD CODE
1 = TIN
2 = TIN/LEAD

DATE CODE



ROW 1 / CKT 1 ID

.050 TYP
TERMINAL PITCHUNMATED HEIGHT
DIM R +.002
-.004.050 TYP
TERMINAL PITCH

POSITION	DIM M	
10	.782	.006
15	1.032	.006
20	1.282	.006
25	1.532	.006
30	1.782	.006
35	2.032	.006
40	2.282	.006
45	2.532	.009
50	2.782	.009

NOTES:

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 5.0: SELECT GOLD FLASH IN TAIL, 7 MI MIN
OPTIONS 6.0 THRU 8.0: 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 SLIM RECPT ASSY 46556
6. APPLICATION SPECIFICATION: AS-45970-001
7. COSMETIC SPECIFICATION: PS-45499-002 CLASS B
8. PART STATUS: CONTACT MOLEX

UPDATED NOTE 2

EC NO: UCP2010-2270

DRWN: TGREGORI 2010/03/05

CHKD: JCOMERC I 2007/05/21

APPR: JCOMERC I 2010/03/05

DESCRIPTION

REV

GENERAL TOLERANCES
(UNLESS SPECIFIED)

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

ANGULAR ± ---°

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONSDIMENSION STYLE
INCH ONLY

DRAWN BY	DATE
TGREGORI	2007/05/21
CHECKED BY	DATE
JCOMERC I	2007/05/21
APPROVED BY	DATE
JCOMERC I	2010/03/05

MATERIAL NO.

SEE CHART

SIZE
ASCALE
4:1DESIGN UNITS
INCH

TITLE

SEARAY SLIM
RECEPTACLE ASSEMBLY
.050 PITCH

MOLEX INCORPORATED

DOCUMENT NO.

SD-46557-001

SHEET NO.

1 OF 4

THIRD ANGLE
PROJECTION

5

4

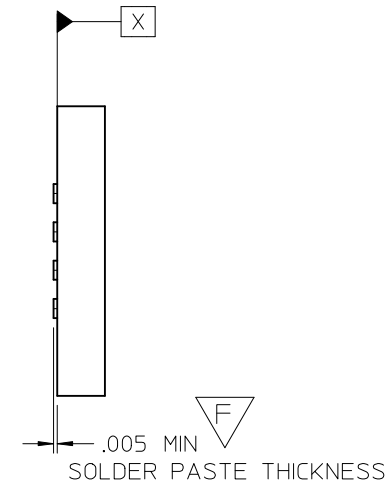
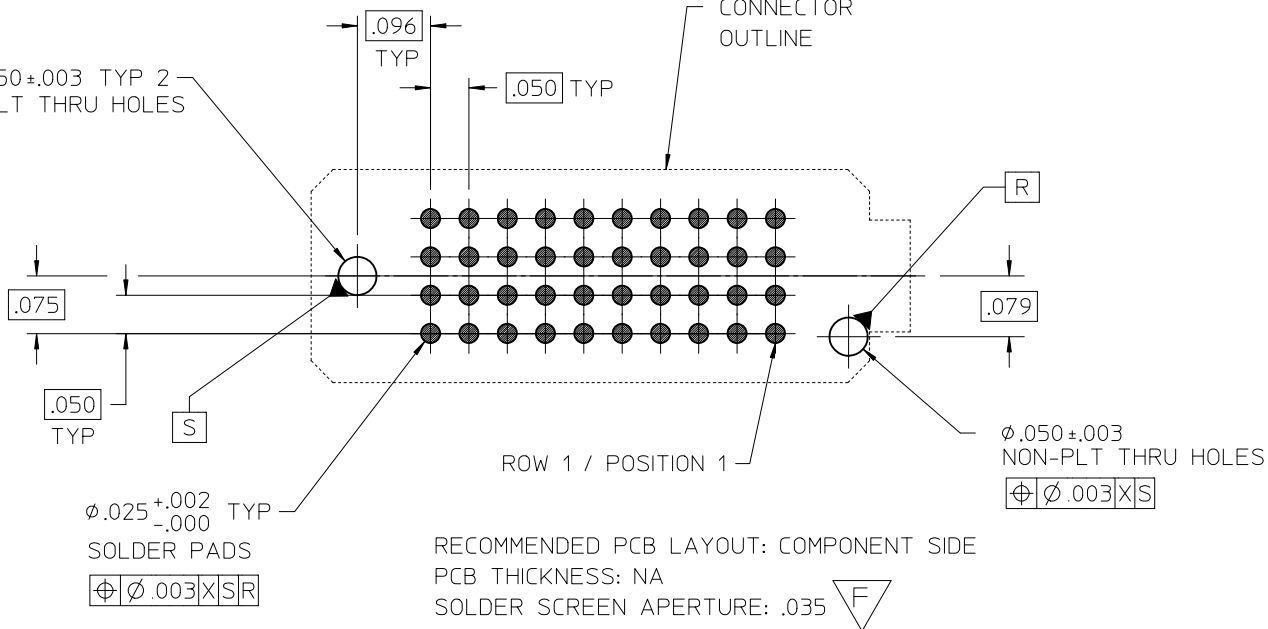
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2

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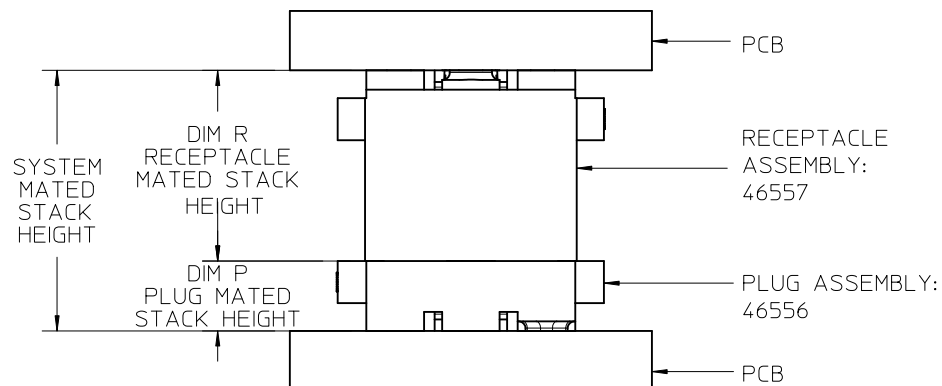
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5
4
3
2
1

φ.050±.003 TYP 2
NON-PLT THRU HOLES



	MM	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

STACK HEIGHTS GIVEN IN MM FOR REF ONLY



SEE SHEET 1
EC NO: UCP2010-2270
DRWN: TGREGORI 2010/03/05
CHKD: JCOMERC I 2007/05/21
APPR: JCOMERC I 2010/03/05

DESCRIPTION
REV

GENERAL TOLERANCES
(UNLESS SPECIFIED)

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

ANGULAR ± ---°

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE
INCH ONLY

DRAWN BY	DATE
TGREGORI	2007/05/21
CHECKED BY	DATE
JCOMERC I	2007/05/21
APPROVED BY	DATE
JCOMERC I	2010/03/05

MATERIAL NO.

SEE CHART

SIZE
A

SCALE
4:1

DESIGN UNITS
INCH

THIRD ANGLE
PROJECTION

SEARAY SLIM
RECEPTACLE ASSEMBLY
.050 PITCH

MOLEX INCORPORATED

DOCUMENT NO.

SD-46557-001

SHEET NO.

2 OF 4

6		5		4		3		2		1		
DIM R: (REF)		5.0 MM		6.0 MM		6.5 MM		7.5 MM		8.0 MM		STACK HEIGHTS GIVEN IN MM FOR REF ONLY
DIM R: HOUSING HEIGHT		.199		.238		.258		.297		.317		
POSITIONS		MATERIAL NO		MATERIAL NO		MATERIAL NO		MATERIAL NO		MATERIAL NO		
10		46557-1145		46557-1245		46557-1345		46557-1445		46557-1545		
20		46557-2145		46557-2245		46557-2345		46557-2445		46557-2545		
30		46557-3145		46557-3245		46557-3345		46557-3445		46557-3545		
40		46557-4145		46557-4245		46557-4345		46557-4445		46557-4545		
50		46557-5145		46557-5245		46557-5345		46557-5445		46557-5545		
15		46557-6145		46557-6245		46557-6345		46557-6445		46557-6545		
25		46557-7145		46557-7245		46557-7345		46557-7445		46557-7545		
35		46557-8145		46557-8245		46557-8345		46557-8445		46557-8545		
45		46557-9145		46557-9245		46557-9345		46557-9445		46557-9545		
NOTES: 1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS SOLDER CHARGE: TIN												
SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CHKD: JCOMERCI 2007/05/21 APPR: JCOMERCI 2010/03/05 H		DESCRIPTION REV		GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± ---° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DIMENSION STYLE INCH ONLY DRAWN BY DATE TGREGORI 2007/05/21 CHECKED BY DATE JCOMERCI 2007/05/21 APPROVED BY DATE JCOMERCI 2010/03/05 MATERIAL NO. SEE CHART		SCALE 1:1 TITLE SEARAY SLIM RECEPTACLE ASSEMBLY .050 PITCH MOLEX INCORPORATED DOCUMENT NO. SD-46557-001		DESIGN UNITS INCH THIRD ANGLE PROJECTION SHEET NO. 3 OF 4		
tb_frame_A_P_AM_T Rev. E 2006/04/15		5		4		3		2		1		

