

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0465574245](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Receptacle, 160 Circuits, 8.00mm (.236") 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
Product Name	SEARAY*

Physical

Circuits (Loaded)	160
Circuits (maximum)	160
Circuits Detail	160
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
Surface Mount Compatible (SMC)	No

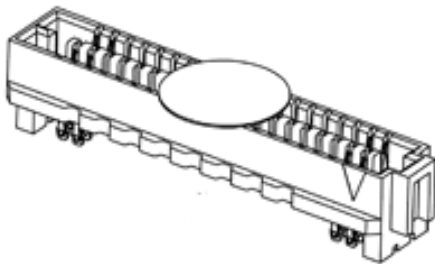


image - Reference only

Series

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

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

Product Specification	PS-45970-001
Sales Drawing	SD-46557-001

*SEARAY is a trademark of Samtec, Inc.

This document was generated on 04/14/2010

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6

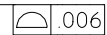
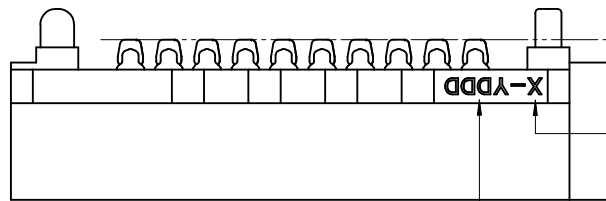
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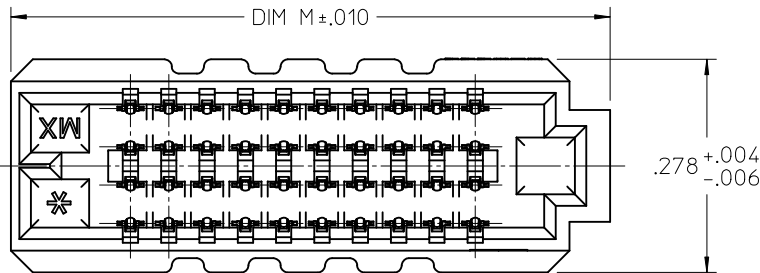
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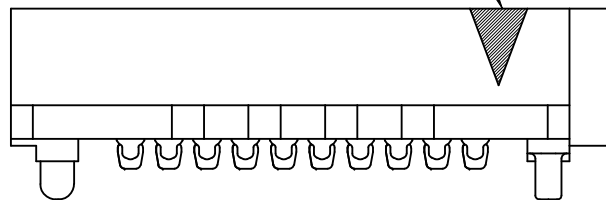
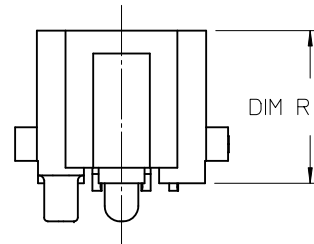
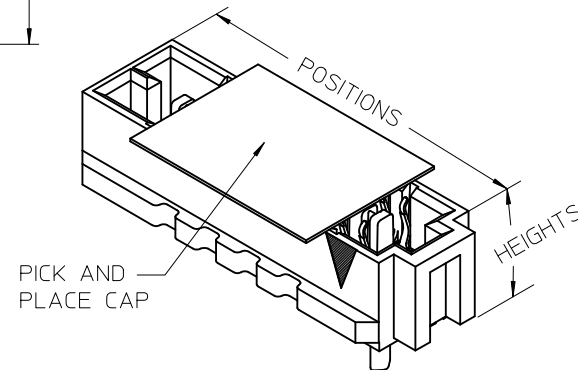
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ACROSS ALL
SOLDER CHARGESLEAD CODE
1 = TIN
2 = TIN/LEAD

DATE CODE



ROW 1 / CKT 1 ID

.050 TYP
TERMINAL PITCH.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

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
INCHTHIRD ANGLE
PROJECTIONSEARAY SLIM
RECEPTACLE ASSEMBLY
.050 PITCH

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DOCUMENT NO.

SD-46557-001

SHEET NO.

1 OF 4

5

4

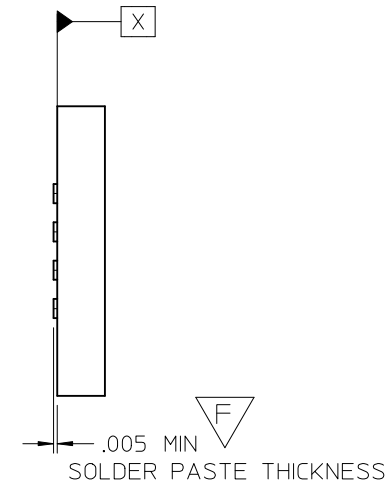
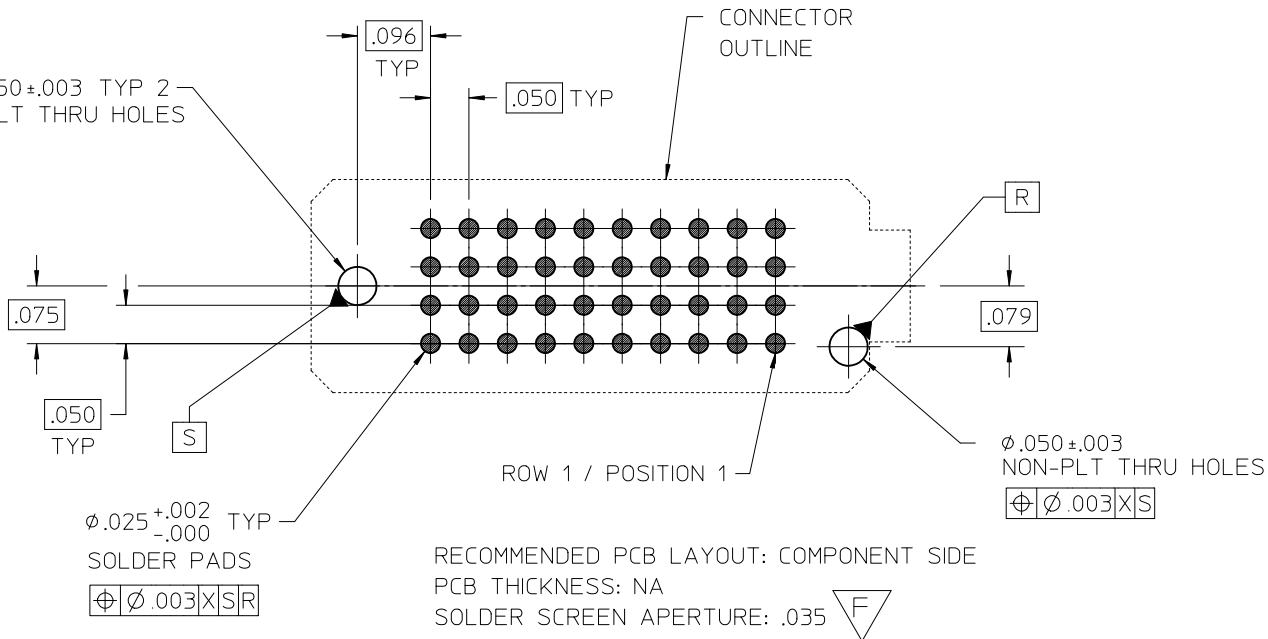
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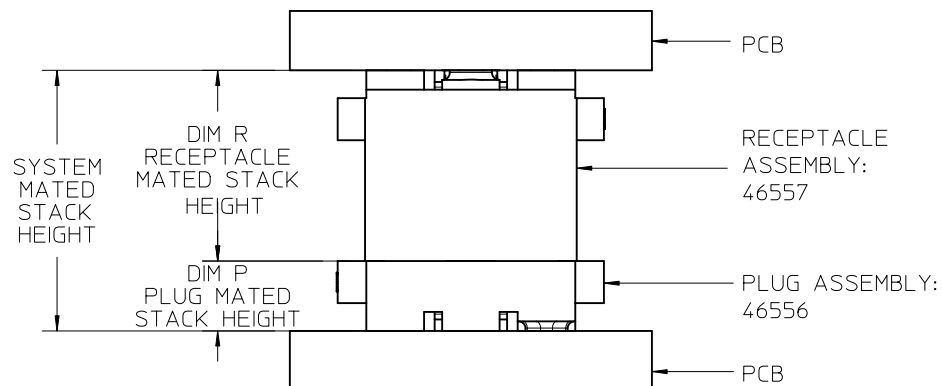
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5
4
3
2
1

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
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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		46557-1147		46557-1247		46557-1347		46557-1447		46557-1547		
20		46557-2147		46557-2247		46557-2347		46557-2447		46557-2547		
30		46557-3147		46557-3247		46557-3347		46557-3447		46557-3547		
40		46557-4147		46557-4247		46557-4347		46557-4447		46557-4547		
50		46557-5147		46557-5247		46557-5347		46557-5447		46557-5547		
15		46557-6147		46557-6247		46557-6347		46557-6447		46557-6547		
25		46557-7147		46557-7247		46557-7347		46557-7447		46557-7547		
35		46557-8147		46557-8247		46557-8347		46557-8447		46557-8547		
45		46557-9147		46557-9247		46557-9347		46557-9447		46557-9547		
NOTES:												
1. THIS SHEET CONTAINS THE FOLLOWING OPTIONS												
SOLDER CHARGE: TIN / LEAD												

SEE SHEET 1

EC NO: UCP2010-2270

DRWN: TGREGORI 2010/03/05

CHKD: JCOMERCI 2007/05/21

APPR: JCOMERCI 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

JCOMERCI

2007/05/21

APPROVED BY

DATE

JCOMERCI

2010/03/05

MATERIAL NO.

SEE CHART

SIZE

A

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

SCALE

1:1

DESIGN UNITS

INCH

THIRD ANGLE PROJECTION

TITLE

SEARAY SLIM RECEPTACLE ASSEMBLY .050 PITCH

MOLEX

MOLEX INCORPORATED

DOCUMENT NO.

SD-46557-001

SHEET NO.

4 OF 4