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Part Number: [0465561147](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 40 Circuits, 2.00mm (.078") Unmated Height, 4 Rows, With Pegs, Solder Charge™

Documents:

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

Agency Certification

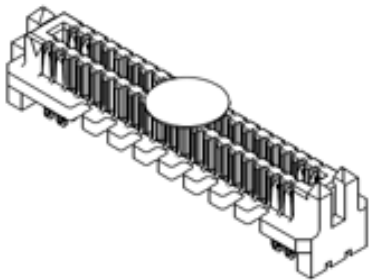
CSA	LR19980
UL	E29179

General

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

Physical

Breakaway	No
Circuits (Loaded)	40
Circuits (maximum)	40
Circuits Detail	40
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-Lead
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



Series

image - Reference only

EU RoHS

Not 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)	60
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	230
Replacement RoHS Compliant Part Number	0465561145

Material Info

Reference - Drawing Numbers

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

*SEARAY is a trademark of Samtec, Inc.

This document was generated on 03/24/2010

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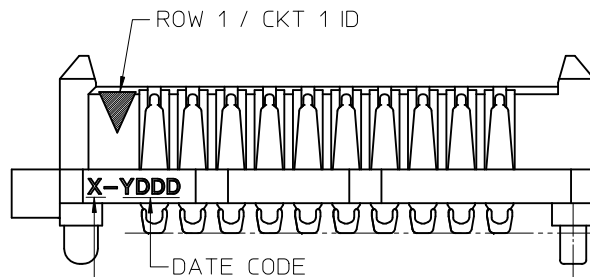
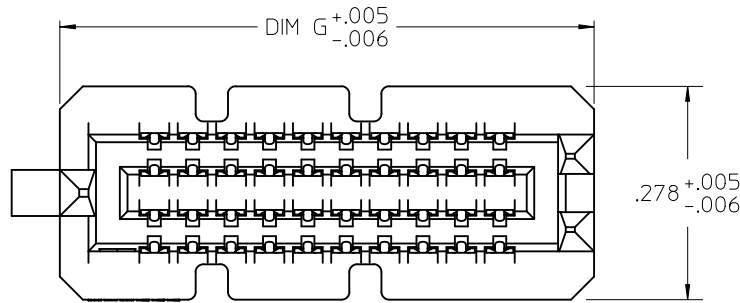
3

2

1

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 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

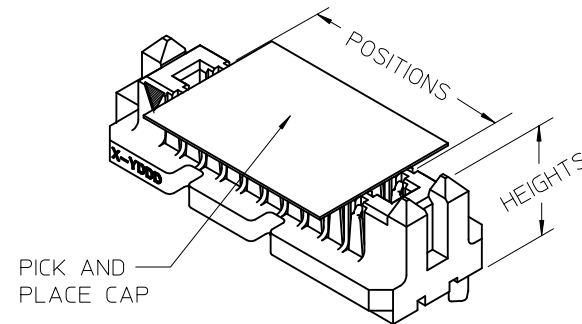
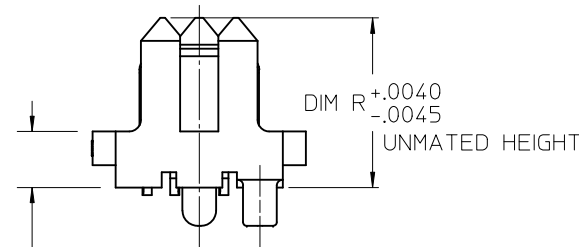
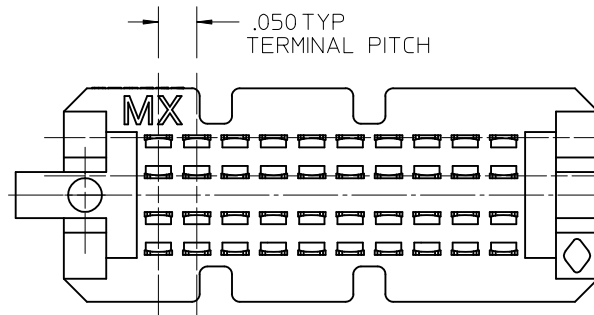


LEAD CODE:
1 = TIN
2 = TIN / LEAD

SEE TABLE

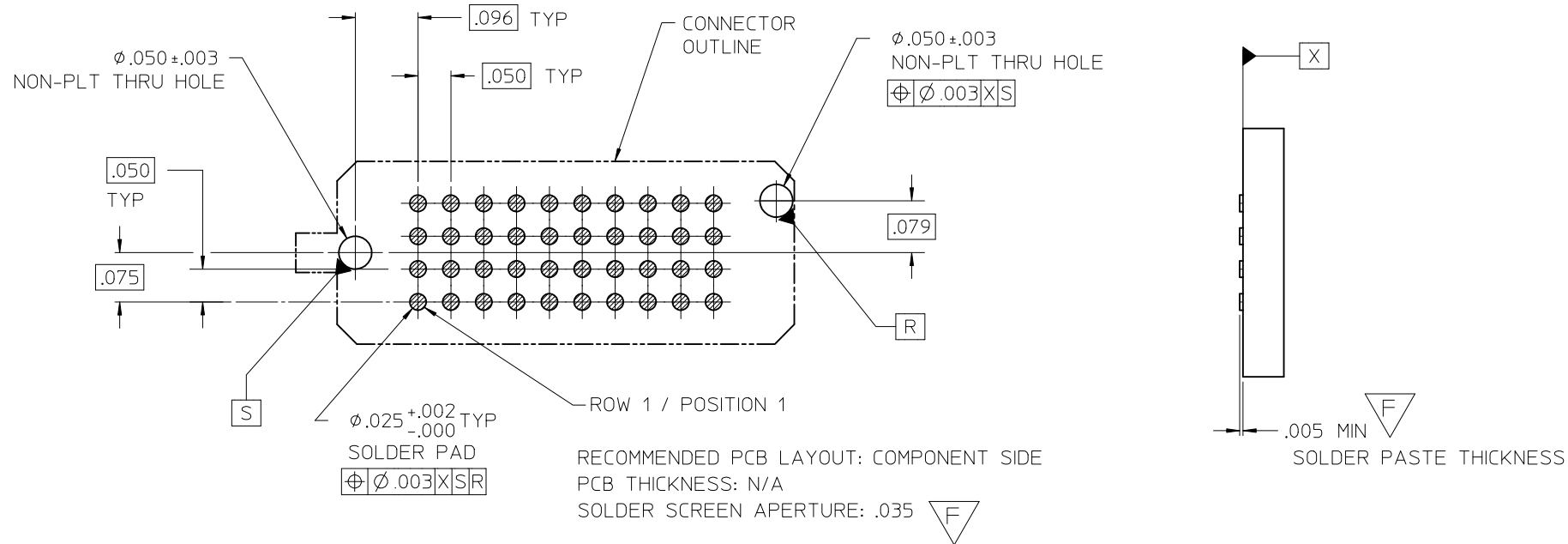
ACROSS ALL
SOLDER
CHARGES

DIM P
REF ONLY
MATED STACK
HEIGHT
(MILLIMETERS)



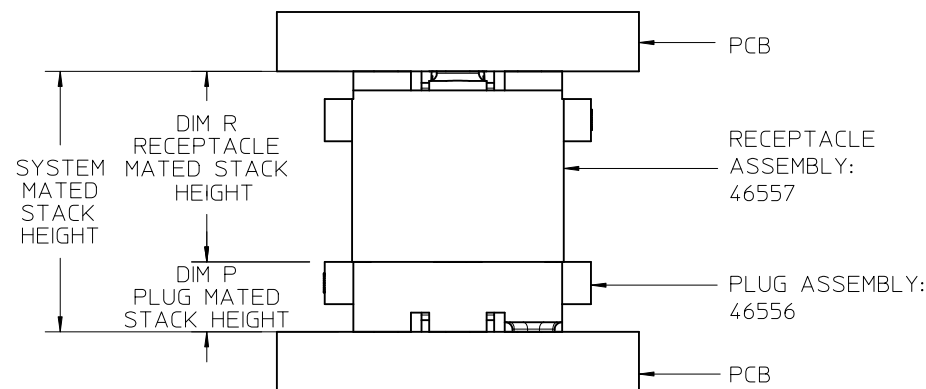
POSITIONS	DIM G	
10	.696	.006
15	.946	.006
20	1.196	.006
25	1.446	.006
30	1.696	.006
35	1.946	.006
40	2.196	.006
45	2.446	.009
50	2.696	.009

UPDATED NOTE 2 EC NO: UCP2010-2270 DRWN: TREGORI 2010/03/05 CHKD: JCOMERC I 2007/05/17 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			
			mm	INCH	DRAWN BY TREGORI	DATE 2007/05/17	TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH				
		4 PLACES	± ---	± ---	CHECKED BY JCOMERC I	DATE 2007/05/17					
		3 PLACES	± ---	± .005	APPROVED BY JCOMERC I	DATE 2010/03/05					
		2 PLACES	± ---	± ---	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-46556-001		SHEET NO. 1 OF 4		
		1 PLACE	± ---	± ---							
		ANGULAR ±1/2°			MOLEX MOLEX INCORPORATED						
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS									



		DIM R RECEPTACLE STACK HEIGHT					
		MM	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



REV	DESCRIPTION
1	SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TREGORI 2010/03/05 CHKD: JCOMERC 2007/05/17 APPR: JCOMERC 2010/03/05

GENERAL TOLERANCES (UNLESS SPECIFIED)		
	mm	INCH
4 PLACES	± .005	± .0002
3 PLACES	± .005	± .0005
2 PLACES	± .005	± .001
1 PLACE	± .005	± .002
ANGULAR ± 1/2°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE INCH ONLY	
DRAWN BY	DATE
TGREGORI	2007/05/17
CHECKED BY	DATE
JCOMERC	2007/05/17
APPROVED BY	DATE
JCOMERC	2010/03/05
MATERIAL NO.	
SEE CHART	
SIZE	
A	

SCALE 4:1	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION	
TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH			
 MOLEX INCORPORATED			
DOCUMENT NO. SD-46556-001			SHEET NO. 2 OF 4

