

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0465562345](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 80 Circuits, 3.50mm (.137") 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

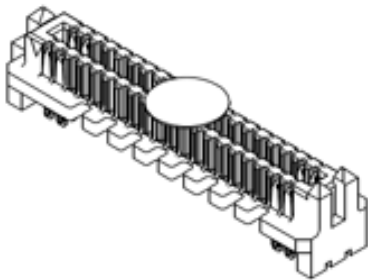
CSA LR19980
UL E29179

General

Product Family PCB Headers
Series [46556](#)
Application Board-to-Board
MolexKits Yes
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



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
[46556Series](#)

Mates With
[46557](#) SEARAY* Slim Receptacles

Termination Interface: Style	Surface Mount
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	
Application Specification	AS-45970-001, AS-45970-002, AS-45970-990
Packaging Specification	PK-45970-002
Product Specification	PS-45970-001
Sales Drawing	SD-46556-001
Test Summary	TS-45970-001

*SEARAY is a trademark of Samtec, Inc.

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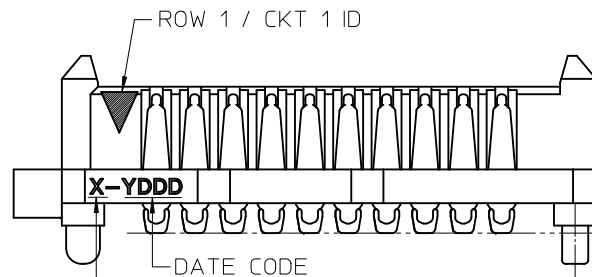
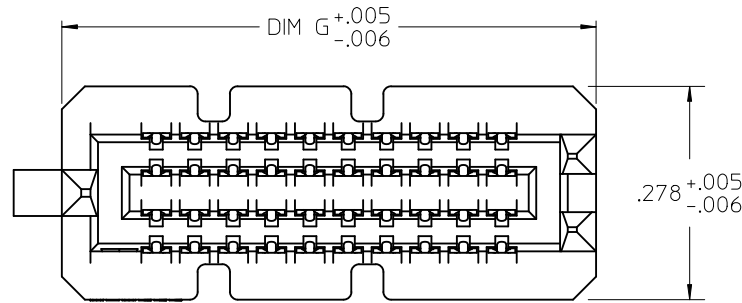
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NOTES:

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

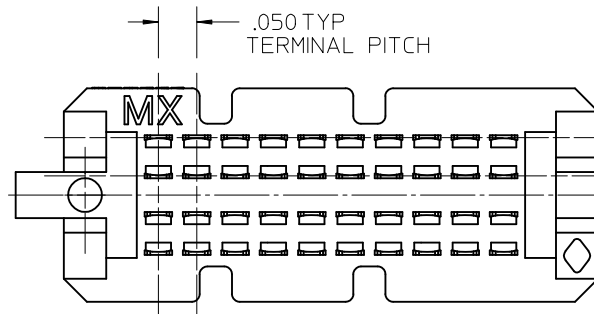


LEAD CODE:
1 = TIN
2 = TIN / LEAD

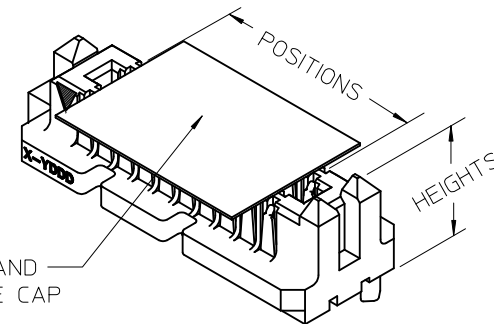
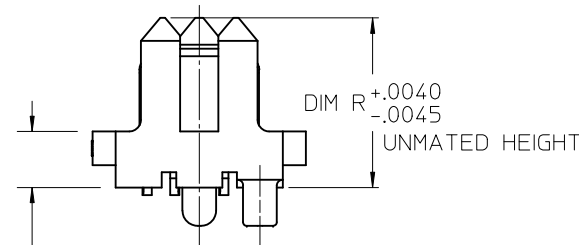
SEE TABLE

ACROSS ALL
SOLDER
CHARGES

DIM P
REF ONLY
MATED STACK
HEIGHT
(MILLIMETERS)



.050 TYP
TERMINAL PITCH



PICK AND
PLACE CAP

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

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

DRAWN BY TREGORI DATE 2007/05/17
CHECKED BY JCOMERC I DATE 2007/05/17
APPROVED BY JCOMERC I DATE 2010/03/05

MATERIAL NO.

SEE CHART

SIZE
ASCALE
4:1DESIGN UNITS
INCH THIRD ANGLE
PROJECTION

SEARAY SLIM
PLUG ASSEMBLY
.050 PITCH



MOLEX INCORPORATED

DOCUMENT NO.

SD-46556-001

SHEET NO.

1 OF 4

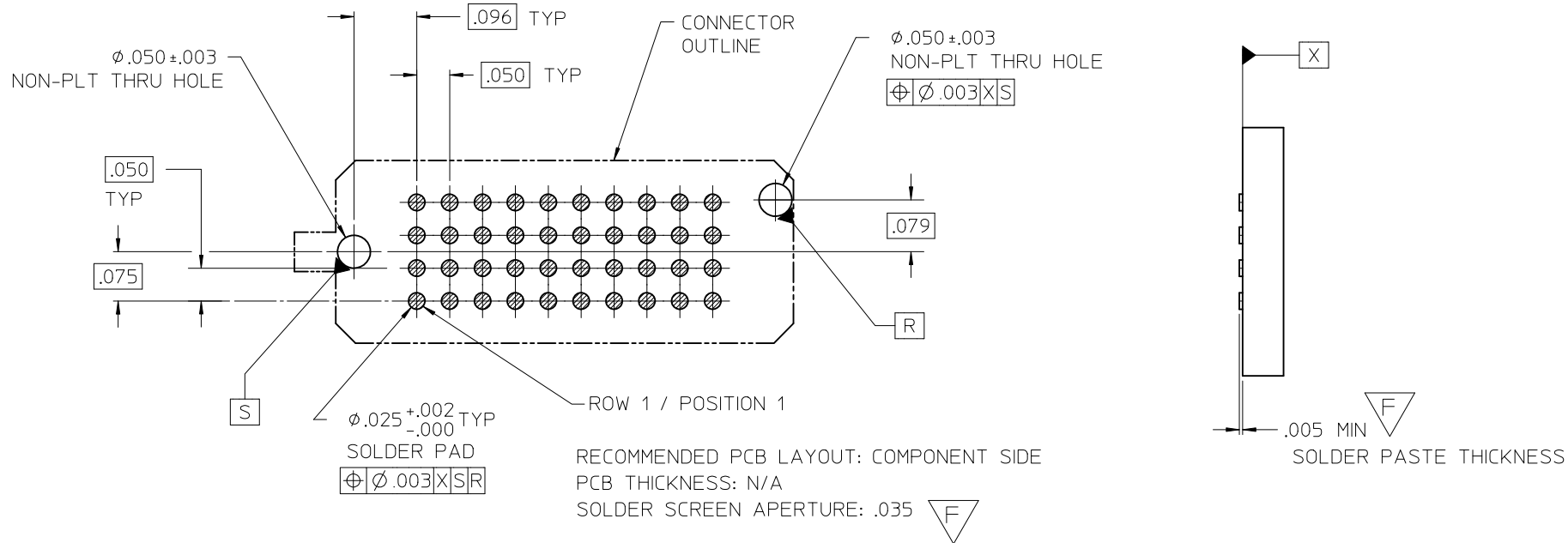
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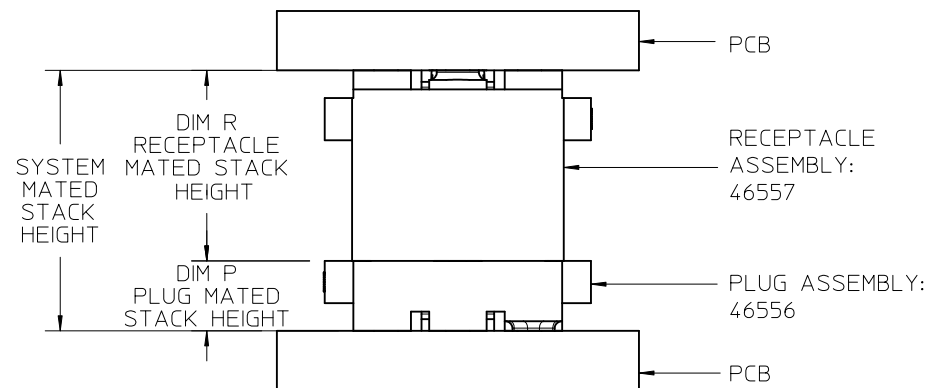
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SD_PACKAGE: CM-46556-001



		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	± ---	± ---
3 PLACES	± ---	± .005
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
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 I	2007/05/17
APPROVED BY	DATE
JCOMERC I	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

6		5		4		3		2		1					
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								

