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Part Number: [0465562745](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 80 Circuits, 7.00mm (.275") 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

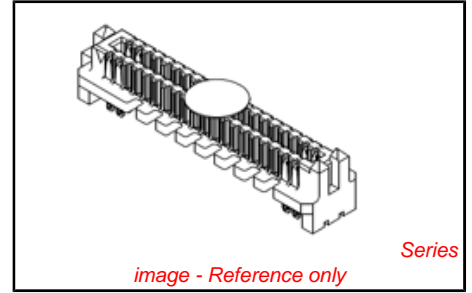
CSA LR19980
 UL E29179

General

Product Family PCB Headers
 Series 46556
 Application Board-to-Board
 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

China RoHS



Not Reviewed

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**

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

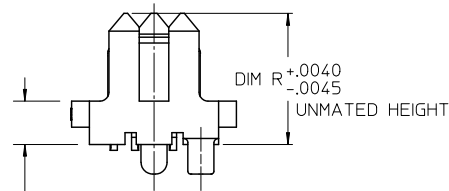
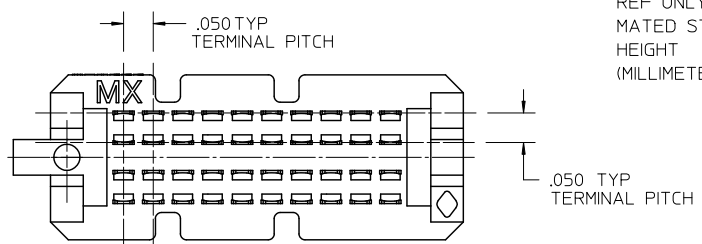
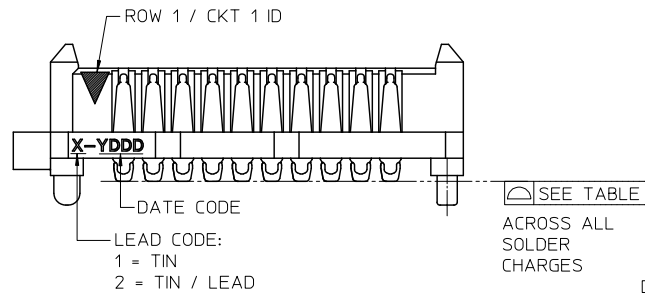
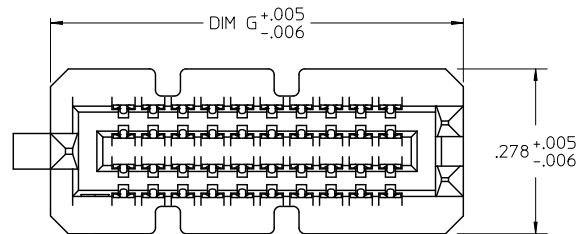
*SEARAY is a trademark of Samtec, Inc.

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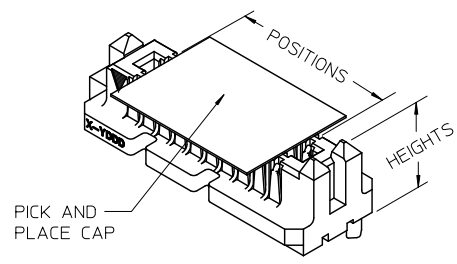
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- NOTES:
- MATERIALS: HOUSING: LCP, UL94V-0, BLACK
CONTACTS: COPPER ALLOY
SOLDER CHARGE: SEE CHART
 - FINISH: ALL OPTIONS - SELECT GOLD IN CONTACT AREA: 30 MI MIN
OPTIONS 2.0 & 2.5: SELECT GOLD FLASH IN TAIL, 7 MI MIN
OPTIONS 3.0 THRU 7.0: SELECT TIN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



DIM P
REF ONLY
MATED STACK
HEIGHT
(MILLIMETERS)

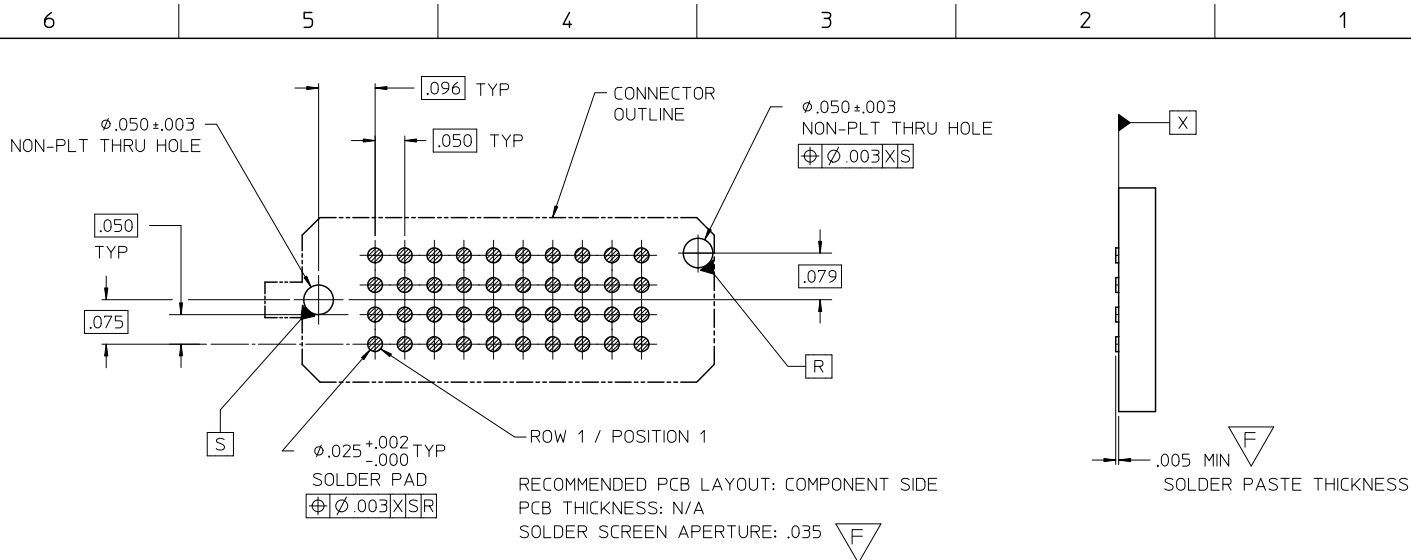


POSITIONS	DIM G	
10	.696	.006
15	.946	.006
20	1.196	.006
25	1.446	.006
30	1.696	.006
35	1.946	.006
40	2.196	.006
45	2.446	.009
50	2.696	.009

UPDATED NOTE 2 EC NO: UCP2010-2270 DRAWN: T.GREGORI 2010/03/05 CHKD: J.COMERCI 2007/05/17 APPR: J.COMERCI 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	mm INCH	DRAWN BY T.GREGORI	DATE 2007/05/17	TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH			
		3 PLACES ± --- ± .005		CHECKED BY J.COMERCI	DATE 2007/05/17	MOLEX INCORPORATED			
		2 PLACES ± --- ± ---		APPROVED BY J.COMERCI	DATE 2010/03/05	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-46556-001	SHEET NO. 1 OF 4	
		ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

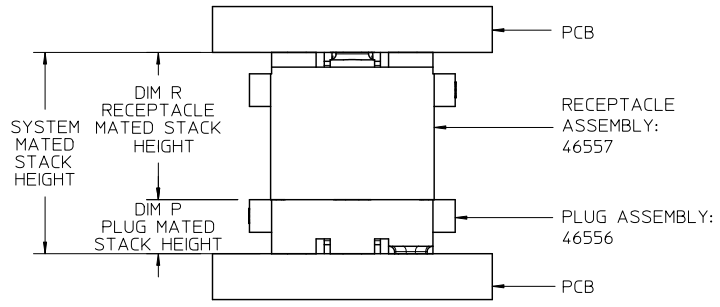
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5 4 3 2 SD_PACKAGE: CM-46556-001



		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	11.0
	3.0	8.0	9.0	9.5	10.5	11.0	11.5
	3.5	8.5	9.5	10.0	11.0	11.5	12.0
	2.5	7.5	8.5	9.0	10.0	10.5	11.0
	4.5	9.5	10.5	11.0	12.0	12.5	13.0
	5.0	10.0	11.0	11.5	12.5	13.0	13.5
	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 DRWNT: GREGORI 2010/03/05 CHKD: COMERC 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
	4 PLACES ± --- ± ---	mm INCH	DRAWN BY TGREGORI	DATE 2007/05/17	TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH
	3 PLACES ± --- ± .005		CHECKED BY JCOMERC I	DATE 2007/05/17	
	2 PLACES ± --- ± ---		APPROVED BY JCOMERC I	DATE 2010/03/05	MOLEX INCORPORATED MATERIAL NO. SD-46556-001 DOCUMENT NO. SD-46556-001
	1 PLACE ± --- ± ---		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
	ANGULAR ±1/2°	SEE CHART			SHEET NO. 2 OF 4

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	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

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

SEE SHEET 1 EC NO: UCP2010-2270 DRWN: GREGORI 2010/03/05 CHKD: JCOMERC 2007/05/17 APPR: JCOMERC 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	mm	INCH	DRAWN BY TGREGORI	DATE 2007/05/17	TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH		
		3 PLACES ± --- ± .005			CHECKED BY JCOMERC I	DATE 2007/05/17			
		2 PLACES ± --- ± ---			APPROVED BY JCOMERC I	DATE 2010/03/05	 MOLEX INCORPORATED		
1 PLACE ± --- ± ---			ANGULAR ± 1/2°		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-46556-001		3 OF 4			
		SIZE A		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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2

1

	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	46556-1147	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 DRWN: GREGORI 2010/03/05 CHKD: JCOMERC 2007/05/17 APPR: JCOMERC 2010/03/05	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
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		3 PLACES	± ---	± .005	CHECKED BY JCOMERC I	DATE 2007/05/17			
		2 PLACES	± ---	± ---	APPROVED BY JCOMERC I	DATE 2010/03/05	 MOLEX INCORPORATED DOCUMENT NO. SD-46556-001 SHEET NO. 4 OF 4		
		1 PLACE	± ---	± ---	MATERIAL NO.				
ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART					
				SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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