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Part Number: [0465567345](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 100 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

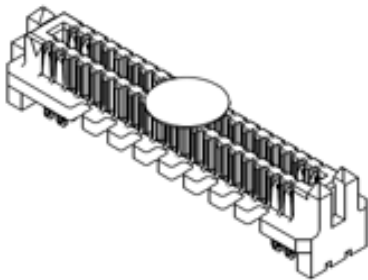
CSA	LR19980
UL	E29179

General

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

Physical

Breakaway	No
Circuits (Loaded)	100
Circuits (maximum)	100
Circuits Detail	100
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



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

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

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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5

4

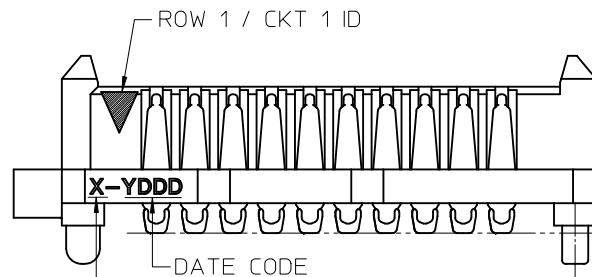
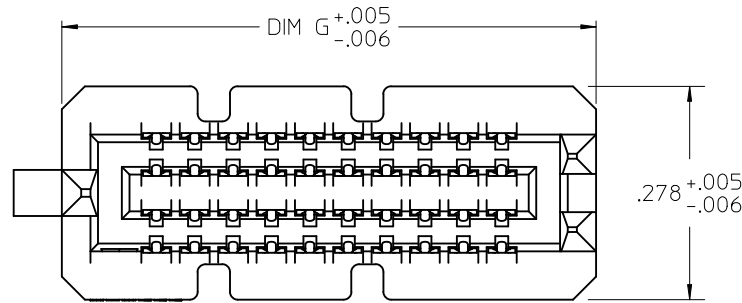
3

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

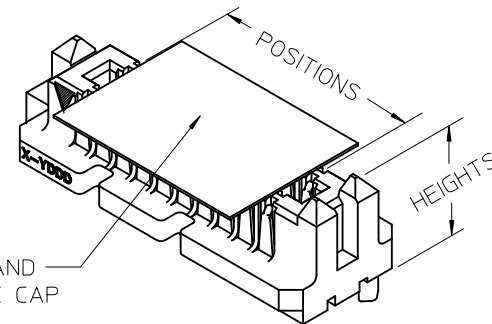
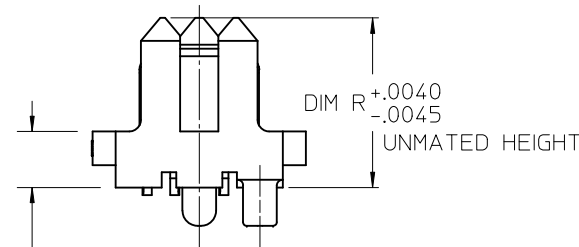
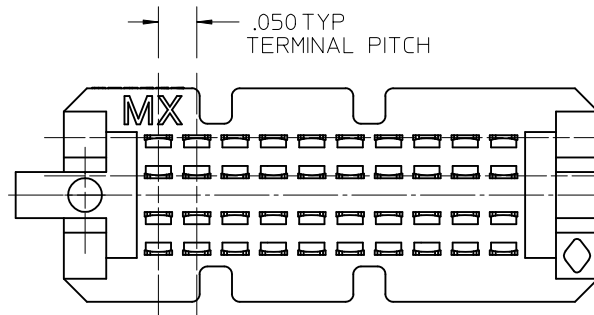


LEAD CODE:
1 = TIN
2 = TIN / LEAD



ACROSS ALL
SOLDER
CHARGES

DIM P
REF ONLY
MATED STACK
HEIGHT
(MILLIMETERS)



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)		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°								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS										
REV		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

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: TGREGORI 2010/03/05 CHKD: JCOMERCI 2007/05/17 APPR: JCOMERCI 2010/03/05 DESCRIPTION REV 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 TGREGORI DATE 2007/05/17 CHECKED BY JCOMERCI DATE 2007/05/17 APPROVED BY JCOMERCI DATE 2010/03/05 MATERIAL NO. SIZE A SCALE 1:1 DESIGN UNITS INCH THIRD ANGLE PROJECTION TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH MOLEX MOLEX INCORPORATED DOCUMENT NO. SD-46556-001 SHEET NO. 3 OF 4 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																	
																				5		4		3		2		1	
																				tb_frame_A_P_AM_T Rev. E 2006/04/15									

		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:																	
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			
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SEE SHEET 1 EC NO: UCP2010-2270 DRWN: TGREGORI 2010/03/05 CHKD: JCOMERCI 2007/05/17 APPR: JCOMERCI 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 JCOMERCI		DATE 2007/05/17			
						2 PLACES		± ---		± ---		APPROVED BY JCOMERCI		DATE 2010/03/05			
1 PLACE		± ---		± ---		ANGULAR ±1/2°		MATERIAL NO. SEE CHART		DOCUMENT NO. SD-46556-001		SHEET NO. 4 OF 4					
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
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