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Part Number: [0465564345](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 160 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

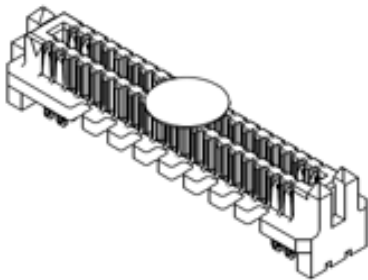
CSA	LR19980
UL	E29179

General

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

Physical

Breakaway	No
Circuits (Loaded)	160
Circuits (maximum)	160
Circuits Detail	160
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 03/26/2010

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6

5

4

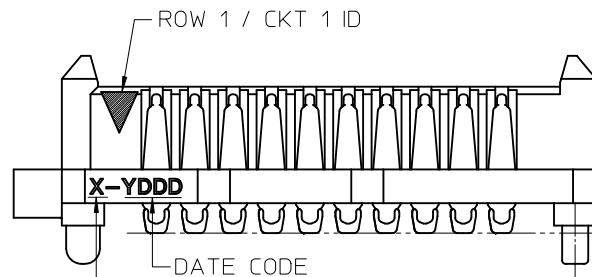
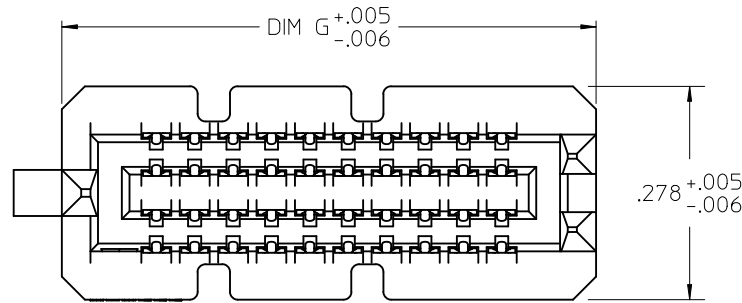
3

2

1

NOTES:

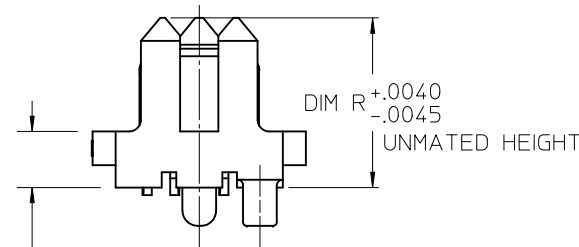
1. MATERIALS: HOUSING: LCP, UL94V-0, BLACK
CONTACTS: COPPER ALLOY
SOLDER CHARGE: SEE CHART
2. FINISH: ALL OPTIONS - SELECT GOLD IN CONTACT AREA: 30 MI MIN
OPTIONS 2.0 & 2.5: SELECT GOLD FLASH IN TAIL, 7 MI MIN
OPTIONS 3.0 THRU 7.0: SELECT TIN IN TAIL, 100 MI MIN
ALL OPTIONS - OVER NICKEL
3. PRODUCT SPECIFICATION: 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



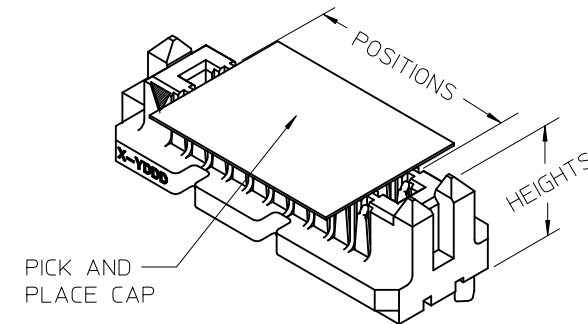
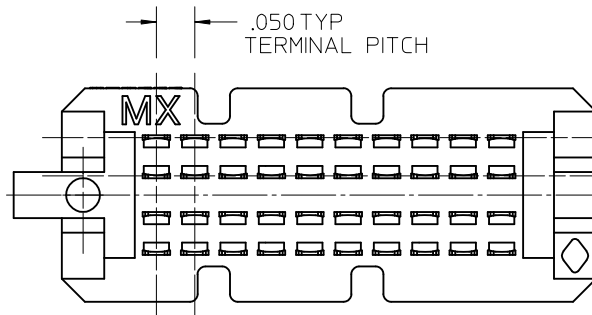
LEAD CODE:
1 = TIN
2 = TIN / LEAD



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 CH'KD:JCOMERC I 2007/05/17 APPR:JCOMERC I 2010/03/05		DESCRIPTION
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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: 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 DATE TGREGORI 2007/05/17 CHECKED BY DATE JCOMERCI 2007/05/17 APPROVED BY DATE JCOMERCI 2010/03/05 MATERIAL NO. SEE CHART SCALE 1:1 DESIGN UNITS INCH THIRD ANGLE PROJECTION SEARAY SLIM PLUG ASSEMBLY .050 PITCH MOLEX INCORPORATED DOCUMENT NO. SD-46556-001 SHEET NO. 3 OF 4 SIZE A THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
																				tb_frame_A_P_AM_T		5		4		3		2		1	
																				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	
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 2007/05/17 APPR: JCOMERCI 2010/03/05		DESCRIPTION		REV		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE INCH ONLY		SCALE 1:1		DESIGN UNITS INCH		THIRD ANGLE PROJECTION	
								DRAWN BY DATE		TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH					
								TGREGORI 2007/05/17							
								CHECKED BY DATE							
										JCOMERCI 2007/05/17		MOLEX INCORPORATED			
				APPROVED BY DATE											
						JCOMERCI 2010/03/05		DOCUMENT NO.							
						ANGULAR ±1/2°		MATERIAL NO.		SHEET NO.					
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-46556-001					
								SIZE A		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
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