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Part Number: [0465565745](#)
Status: **Active**
Description: 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY* Slim Plug, 200 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

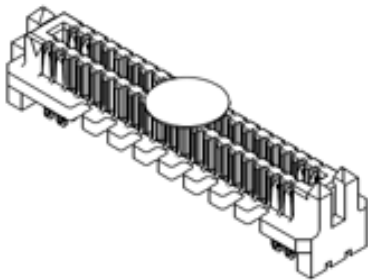
CSA	LR19980
UL	E29179

General

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

Physical

Breakaway	No
Circuits (Loaded)	200
Circuits (maximum)	200
Circuits Detail	200
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* Receptacle

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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6

5

4

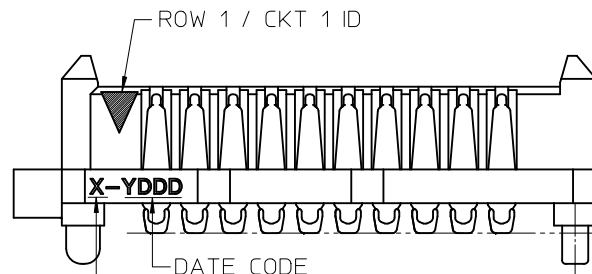
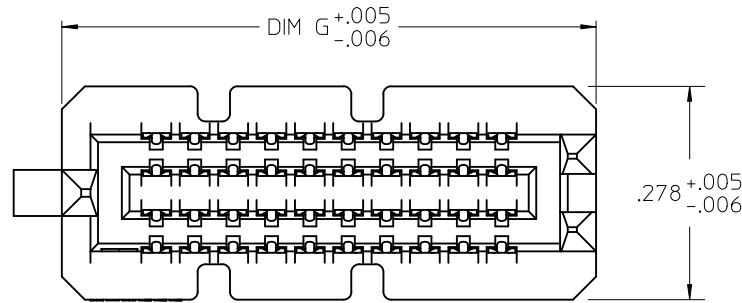
3

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

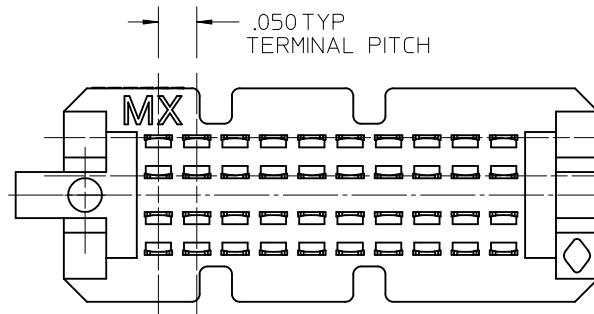


LEAD CODE:
1 = TIN
2 = TIN / LEAD

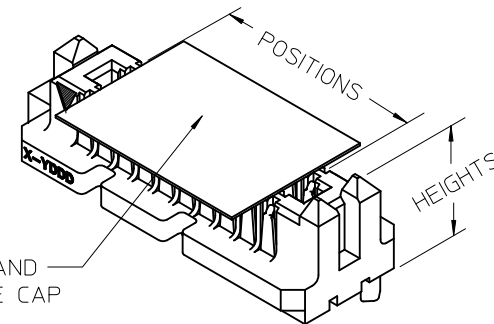
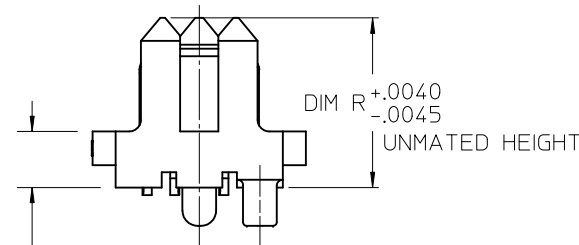
SEE TABLE

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

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 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											
tb_frame_A_P_AM_T Rev. E 2006/04/15		5		4		3		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: TGREGOR I 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 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION		
					DRAWN BY DATE		TITLE SEARAY SLIM PLUG ASSEMBLY .050 PITCH				
					TGREGOR I 2007/05/17						
					CHECKED BY DATE						
					JCOMERC I 2007/05/17		MOLEX INCORPORATED				
					APPROVED BY DATE						
				JCOMERC I 2010/03/05		DOCUMENT NO. SD-46556-001					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE CHART		SHEET NO. 4 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 Rev. E 2006/04/15		5		4		3		2		1	