

PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION

**Part Number:** [0465574345](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") by 1.27mm (.050") Pitch SEARAY\* Slim Receptacle, 160 Circuits, 6.50mm (.255") Unmated Height, 4 Rows, With Pegs, Solder Charge™ Lead Free

**Documents:**

|                               |                                                          |
|-------------------------------|----------------------------------------------------------|
| <a href="#">3D Model</a>      | <a href="#">Product Specification PS-45970-001 (PDF)</a> |
| <a href="#">Drawing (PDF)</a> | <a href="#">RoHS Certificate of Compliance (PDF)</a>     |

**Agency Certification**

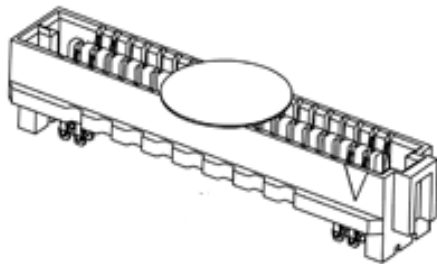
|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

**General**

|                |                       |
|----------------|-----------------------|
| Product Family | PCB Receptacles       |
| Series         | <a href="#">46557</a> |
| Application    | Board-to-Board        |
| MolexKits      | Yes                   |
| Product Name   | SEARAY*               |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Circuits (Loaded)              | 160                            |
| Circuits (maximum)             | 160                            |
| Circuits Detail                | 160                            |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 100                            |
| Flammability                   | 94V-0                          |
| Glow-Wire Compliant            | No                             |
| Guide to Mating Part           | No                             |
| Keying to Mating Part          | None                           |
| Lock to Mating Part            | No                             |
| Material - Metal               | Copper Alloy                   |
| Material - Plating Mating      | Gold, Nickel                   |
| Material - Plating Termination | Tin                            |
| Material - Resin               | High Temperature Thermoplastic |
| Number of Rows                 | 4                              |
| Orientation                    | Vertical                       |
| PC Tail Length (in)            | 0.086 In                       |
| PC Tail Length (mm)            | 2.18 mm                        |
| PCB Locator                    | Yes                            |
| PCB Retention                  | Yes                            |
| PCB Thickness Recommended (in) | 0.062 In                       |
| PCB Thickness Recommended (mm) | 1.57 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                             |
| Plating min: Mating (µm)       | 0.75                           |
| Plating min: Termination (µin) | 100                            |
| Plating min: Termination (µm)  | 2.5                            |
| Polarized to Mating Part       | Yes                            |
| Polarized to PCB               | Yes                            |
| Robotic Placement              | Pick and Place Cap             |
| Stackable                      | No                             |



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](mailto: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**

[46557Series](#)

**Mates With**

[46556](#) Searay\* Slim Plug Connector

|                                |                 |
|--------------------------------|-----------------|
| Surface Mount Compatible (SMC) | No              |
| Temperature Range - Operating  | -55°C to +125°C |
| Termination Interface: Style   | Through Hole    |

**Electrical**

|                               |         |
|-------------------------------|---------|
| Current - Maximum per Contact | 1A      |
| Grounding to PCB              | No      |
| 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-45971-002                             |
| Product Specification     | PS-45970-001                             |
| Sales Drawing             | SD-46557-001                             |
| Test Summary              | TS-45970-001                             |

\*SEARAY is a trademark of Samtec, Inc.

This document was generated on 06/07/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

6

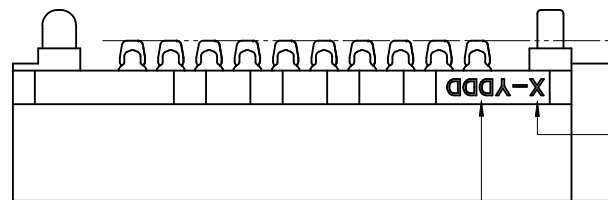
5

4

3

2

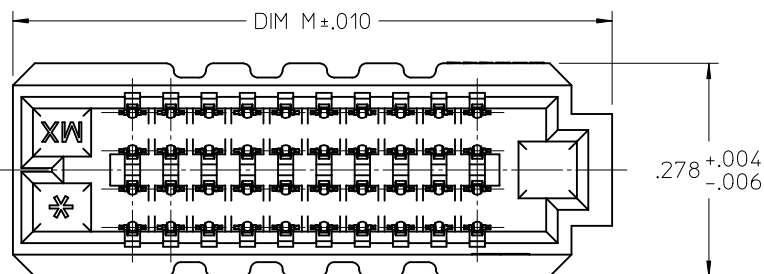
1



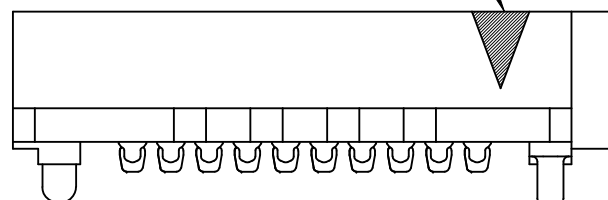
$\frac{1}{2}$  .006 ACROSS ALL  
SOLDER CHARGES

LEAD CODE  
1 = TIN  
2 = TIN/LEAD

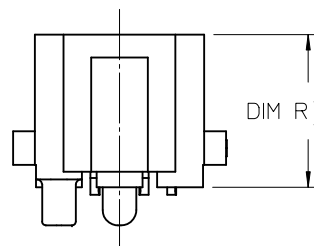
DATE CODE



ROW 1 / CKT 1 ID

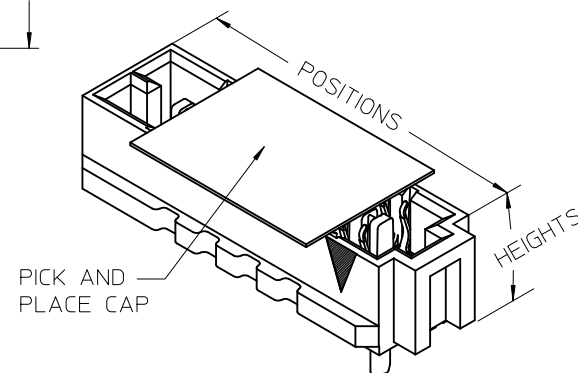


.050 TYP  
TERMINAL PITCH



UNMATED HEIGHT

DIM R  $\frac{+}{-}$  .002  
-.004



PICK AND  
PLACE CAP

| POSITION | DIM M | $\frac{1}{2}$ |
|----------|-------|---------------|
| 10       | .782  | .006          |
| 15       | 1.032 | .006          |
| 20       | 1.282 | .006          |
| 25       | 1.532 | .006          |
| 30       | 1.782 | .006          |
| 35       | 2.032 | .006          |
| 40       | 2.282 | .006          |
| 45       | 2.532 | .009          |
| 50       | 2.782 | .009          |

UPDATED NOTE 2

EC NO: UCP2010-2270

DRWN: TGREGORI 2010/03/05

CHKD: JCOMERC I 2007/05/21

APPR: JCOMERC I 2010/03/05

DESCRIPTION

GENERAL TOLERANCES  
(UNLESS SPECIFIED)

|          | mm        | INCH       |
|----------|-----------|------------|
| 4 PLACES | $\pm$ --- | $\pm$ ---  |
| 3 PLACES | $\pm$ --- | $\pm$ .005 |
| 2 PLACES | $\pm$ --- | $\pm$ ---  |
| 1 PLACE  | $\pm$ --- | $\pm$ ---  |

ANGULAR  $\pm$  ---°

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DIMENSION STYLE  
INCH ONLY

|             |            |
|-------------|------------|
| DRAWN BY    | DATE       |
| TGREGORI    | 2007/05/21 |
| CHECKED BY  | DATE       |
| JCOMERC I   | 2007/05/21 |
| APPROVED BY | DATE       |
| JCOMERC I   | 2010/03/05 |

MATERIAL NO.

SEE CHART

SIZE  
A

SCALE  
4:1

DESIGN UNITS  
INCH

THIRD ANGLE  
PROJECTION

SEARAY SLIM  
RECEPTACLE ASSEMBLY  
.050 PITCH



MOLEX INCORPORATED

DOCUMENT NO.

SD-46557-001

SHEET NO.

1 OF 4

5

4

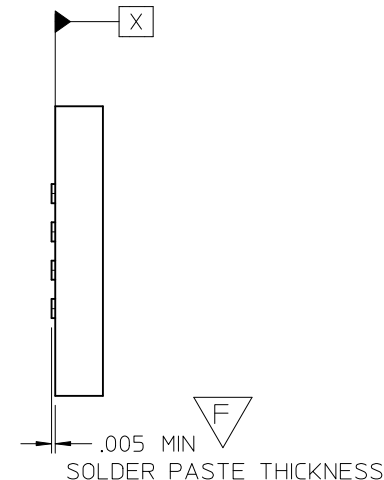
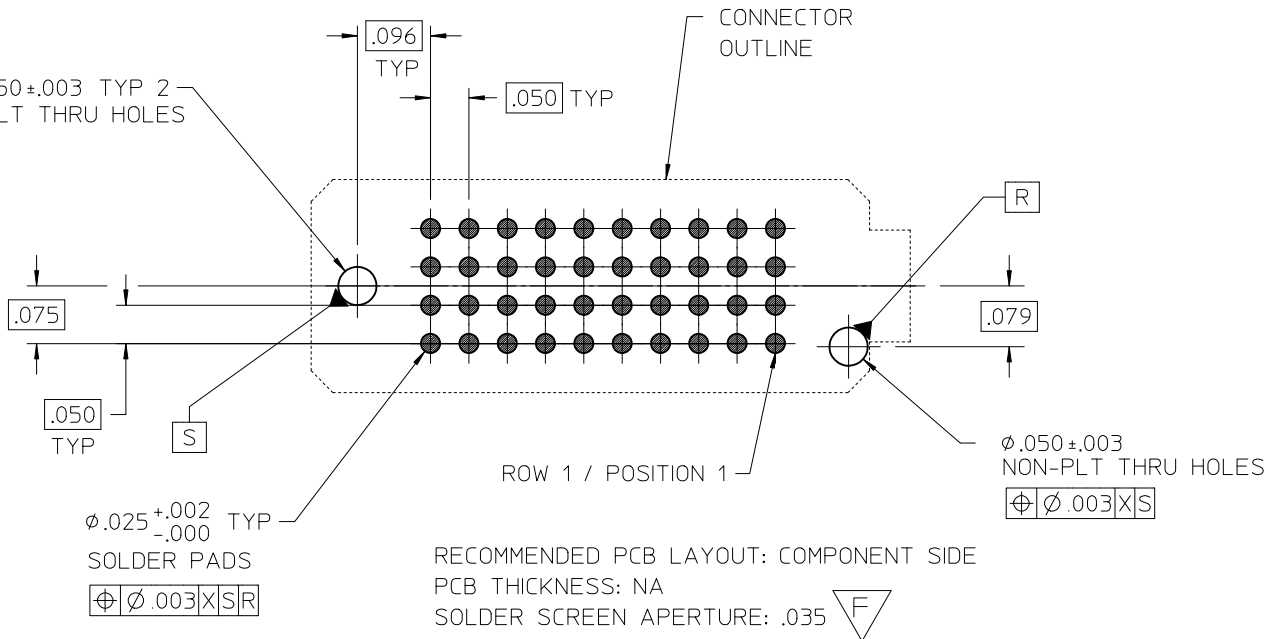
3

2

1

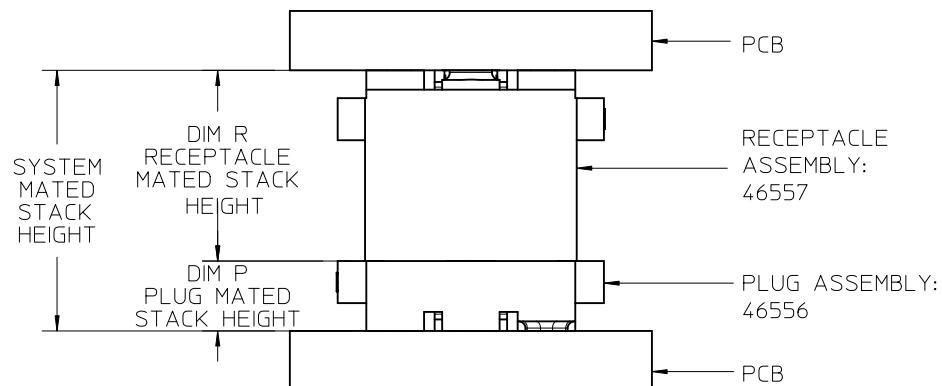
6  
5  
4  
3  
2  
1

φ.050±.003 TYP 2  
NON-PLT THRU HOLES



|                            | MM  | DIM R<br>RECEPTACLE STACK HEIGHT |      |      |      |      |
|----------------------------|-----|----------------------------------|------|------|------|------|
|                            |     | 5.0                              | 6.0  | 6.5  | 7.5  | 8.0  |
| DIM P<br>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



SEE SHEET 1  
EC NO: UCP2010-2270  
DRWN: TGREGORI 2010/03/05  
CHKD: JCOMERC I 2007/05/21  
APPR: JCOMERC I 2010/03/05

DESCRIPTION  
REV

GENERAL TOLERANCES  
(UNLESS SPECIFIED)

|          | mm    | INCH   |
|----------|-------|--------|
| 4 PLACES | ± --- | ± ---  |
| 3 PLACES | ± --- | ± .005 |
| 2 PLACES | ± --- | ± ---  |
| 1 PLACE  | ± --- | ± ---  |

ANGULAR ± ---°

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DIMENSION STYLE  
INCH ONLY

|             |            |
|-------------|------------|
| DRAWN BY    | DATE       |
| TGREGORI    | 2007/05/21 |
| CHECKED BY  | DATE       |
| JCOMERC I   | 2007/05/21 |
| APPROVED BY | DATE       |
| JCOMERC I   | 2010/03/05 |

MATERIAL NO.

SEE CHART

SIZE  
A

SCALE  
4:1

DESIGN UNITS  
INCH

THIRD ANGLE  
PROJECTION

SEARAY SLIM  
RECEPTACLE ASSEMBLY  
.050 PITCH

MOLEX INCORPORATED

DOCUMENT NO.  
SD-46557-001

SHEET NO.  
2 OF 4



