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**Part Number:** [0459713515](#)  
**Status:** **Active**  
**Overview:** SEARAY\* Plugs, Receptacles and Copper Flex Assemblies  
**Description:** SEARAY\* Receptacle, 300 Circuits, 8.00mm Unmated Height, 10 Rows, with Pegs, Solder Charge™ Lead-Free

**Documents:**

|  |  |
|--|--|
| <a href="#">3D Model</a>                                     | <a href="#">Application Specification AS-45970-002 (PDF)</a> |
| <a href="#">Drawing (PDF)</a>                                | <a href="#">Application Specification AS-45970-990 (PDF)</a> |
| <a href="#">Product Specification PS-45970-001 (PDF)</a>     | <a href="#">Test Summary TS-45970-001 (PDF)</a>              |
| <a href="#">Product Specification PS-45970-002 (PDF)</a>     | <a href="#">Test Summary TS-45970-002 (PDF)</a>              |
| <a href="#">Application Specification AS-45970-001 (PDF)</a> | <a href="#">RoHS Certificate of Compliance (PDF)</a>         |

**Agency Certification**

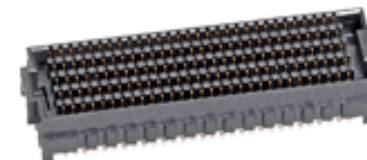
|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

**General**

|                  |   |
|------------------|---|
| Product Family   | PCB Receptacles   |
| Series           | <a href="#">45971</a>   |
| Application      | Board-to-Board, Signal  |
| Electrical Model | Yes   |
| Overview         | <a href="#">SEARAY* Plugs, Receptacles and Copper Flex Assemblies</a> |
| Product Name     | SEARAY*   |
| UPC              | 756054924716  |

**Physical**

|                                |                                |
|--------------------------------|--------------------------------|
| Circuits (Loaded)              | 300                            |
| Circuits (maximum)             | 300                            |
| Color - Resin                  | Black                          |
| Durability (mating cycles max) | 100                            |
| Flammability                   | 94V-0                          |
| Glow-Wire Compliant            | No                             |
| Guide to Mating Part           | No                             |
| Keying to Mating Part          | Yes                            |
| Lock to Mating Part            | No                             |
| Material - Metal               | Copper Alloy                   |
| Material - Plating Mating      | Gold                           |
| Material - Plating Termination | Tin                            |
| Material - Resin               | High Temperature Thermoplastic |
| Net Weight                     | 5.562/g                        |
| Number of Rows                 | 10                             |
| Orientation                    | Vertical                       |
| PCB Locator                    | Yes                            |
| PCB Retention                  | Yes                            |
| PCB Thickness - Recommended    | 1.60mm                         |
| Packaging Type                 | Embossed Tape on Reel          |
| Pitch - Mating Interface       | 1.27mm                         |
| Pitch - Termination Interface  | 1.27mm                         |
| Plating min - Mating           | 0.762µm                        |
| Plating min - Termination      | 2.540µm                        |
| Polarized to Mating Part       | Yes                            |
| Polarized to PCB               | Yes                            |
| Robotic Placement              | Pick and Place Cap             |
| Stackable                      | No                             |
| Surface Mount Compatible (SMC) | Yes                            |



*Series image - Reference only*

**EU ELV**

**Not Relevant**

**EU RoHS**

**Compliant**

**REACH SVHC**

Not Contained Per  
-ED/79/2015 (17  
December 2015)

**Halogen-Free**

**Status**

**Low-Halogen**

**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
Please visit the [Contact Us](#) section for any non-product compliance questions.

China ROHS

ELV

Green Image

Not Relevant

**Search Parts in this Series**

[45971](#) Series

**Mates With**

[45970](#) SEARAY\* Plug

|                               |                 |
|-------------------------------|-----------------|
| Temperature Range - Operating | -55°C to +125°C |
| Termination Interface: Style  | Surface Mount   |
| Unmated Height                | 8.00mm          |

**Electrical**

|                               |         |
|-------------------------------|---------|
| Current - Maximum per Contact | 2.7A    |
| Grounding to PCB              | No      |
| Voltage - Maximum             | 240V AC |

**Solder Process Data**

|  |        |
|--|--------|
| Duration at Max. Process Temperature (seconds) | 003    |
| Lead-free Process Capability                   | REFLOW |
| Max. Cycles at Max. Process Temperature        | 001    |
| Process Temperature max. C                     | 260    |

**Material Info****Reference - Drawing Numbers**

|                           |  |
|---------------------------|--|
| Application Specification | AS-45970-001, AS-45970-002, AS-45970-990 |
| Electrical Model Document | EE-45970-010                             |
| Product Specification     | PS-45970-001, PS-45970-002               |
| S-Parameter Model         | SP-45970-010                             |
| Sales Drawing             | SD-45971-001                             |
| Symbol/Footprint Data     | SYM-45971-3515                           |
| Test Summary              | TS-45970-001, TS-45970-002               |

\*SEARAY is a trademark of Samtec, Inc.

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